



2015

Baseline Technology Assessment

Provincial Final Report

Prepared for:

Alberta Education

Prepared by:

IBM Canada K-12 Education

June 2015





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Baseline Technology Assessment: Provincial Final Report.

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Provincial Final Report

Baseline Technology Assessment Overview

Baseline Technology Assessment Background

Alberta's Learning and Technology Policy Framework (LTPF) was developed to provide leadership and strategic direction for government and school authorities in the use of technology to support learning. To help guide the implementation of this policy framework, Alberta Education contracted IBM Canada Ltd. to conduct a Baseline Technology Assessment for all public, separate, Francophone and charter school authorities in the province.

Data was collected based on the five Policy Directions identified in the Learning and Technology Policy Framework:

Policy Direction 1: Student-Centred Learning - How technology is used to support student-centred, personalized, authentic learning for all students.

Policy Direction 2: Research and Innovation - How teachers, administrators and other education professionals read, review, participate in, share and apply research and evidence-based practices to sustain and advance innovation in education.

Policy Direction 3: Professional Learning - How teachers, administrators and other education professionals develop, maintain and apply the knowledge, skills and attributes that enable them to use technology effectively, efficiently and innovatively in support of learning and teaching.

Policy Direction 4: Leadership - How education leaders establish policy and governance structures, cultivate innovation and build capacity within the system to leverage technology in support of student-centred learning and system efficiencies.

Policy Direction 5: Access, Infrastructure and Digital Learning Environments - The extent to which all students, teachers, administrators and other education professionals have access to appropriate devices, reliable infrastructure, high-speed networks and digital learning environments.

The overall objective of the assessment was to provide insight on the system's capacity to support the vision of the Learning and Technology Policy Framework and implement the outcomes and actions identified under the five Policy Directions. The consolidated provincial findings will inform Alberta Education about the current state of technology use and infrastructure in each school authority. The perspectives of principals, teachers and school authority leadership teams (superintendents, technology directors, etc.) in relation to the use of technology in schools was collected through surveys and interviews.

In addition to this report, each school authority that completed the surveys and participated in an interview was provided a report specific to their school authority. These reports summarize the survey data from the individual school authorities and show the comparative provincial data. They also present any feedback, suggestions or comments that were provided during the interviews.



Assessment Methodology and Data Collection Instruments

The Baseline Technology Assessment was conducted in two phases.

Phase 1- Online Surveys (April – May 2014):

1. Three quantitative, online surveys were designed and developed, one for each of the following target groups:
 - a. Teachers
 - i. This group included all Kindergarten to Grade 12 teachers.
 - ii. There were 30 questions in the survey, with some questions having multiple parts to them, resulting in a total of 85 possible responses.
 - b. Education Technology and Information Technology Leaders
 - i. This group included central office educational technology staff such as directors of technology, coordinators, or technology coaches.
 - ii. There were 64 questions in the survey, with some questions having multiple parts to them, resulting in a total of 157 possible responses.
 - c. School Authority Leaders
 - i. This group included central office leaders such as superintendents and assistant superintendents, as well as principals and vice principals.
 - ii. There were 26 questions in the survey, with some questions having multiple parts to them, resulting in a total of 80 possible responses.
2. The design, content and number of questions of each survey was developed in collaboration with the School Technology Branch (STB) and the School Technology Advisory Committee (STAC).
3. Alberta's Learning and Technology Policy Framework was the foundation upon which the survey questions were created. The questions in each of the three surveys were aligned to the five Policy Directions contained within the Learning and Technology Policy Framework:
 - a. Student-Centred Learning
 - b. Research and Innovation
 - c. Professional Learning
 - d. Leadership
 - e. Access, Infrastructure and Digital Learning Environments
4. The survey questions were refined, tested and validated through the completion of a pre-testing of the surveys by staff from three school authorities as well as STB and IBM members.
5. The surveys were distributed to 61 school jurisdictions and 13 charter authorities.
6. In an effort to provide all provincial teachers, school authority leaders and ET/IT leaders an opportunity to have their voice heard, and given the time and resources required to conduct a random sampling across 74 school authorities, a nonprobability, purposeful sampling was used for the online surveys, rather than a



probability based random sampling. The target populations of teachers, ET/IT leaders and school authority leaders were identified by the STB, and the individual school authorities were asked to distribute the surveys to all potential respondents in all their schools and offices. Given the use of a non-probability, purposeful sampling rather than a random sampling, reliability cannot be measured. The interpretation of the results, therefore, may not be representative of the entire population. Further details on the survey population and breakdown of respondents is found in the Provincial Online Survey Participation section of this report.

7. The surveys were opened for responses from April 9, 2014 to May 16, 2014 and were monitored on a daily basis.
8. Quantitative frequency distribution analysis was performed using analytics contained within the survey tool as well as with the IBM application SPSS Statistics.
9. Upon the closing of the surveys, an interim report analyzing the quantitative survey data as well as a summary report for presentation purposes, were produced for the STB.

Phase 2 – School Authority Interviews and Reports (May – December 2014):

1. Individual school authority, semi-structured interviews were conducted to collect qualitative data. The interviews consisted of twenty-two questions that were developed based, in part, on the findings from Phase 1, and in collaboration with the STB. Eleven of the twenty-two questions were aligned with specific survey questions. School authorities were provided with their survey data pertaining to these eleven questions in order to enable them to compare and validate their survey responses.
2. Thirty-one school authorities participated in face-to-face interviews, thirty school authorities participated in teleconference interviews and one school authority interview was conducted via video conference. School authorities were given direction as to the composition of the desired interview participants, with the suggested attendees to include superintendents or assistant superintendents, program staff, IT manager, principals or vice principals and teachers. While the actual participants varied by school authority, there were generally five to ten school authority participants in each interview.
3. Three IBM interview teams consisted of one interviewer and one recorder. All members of the three interview teams, both interviewer and recorder, are educational consultants trained in capturing and interpreting interview focus group comments. Each member of the interview teams was either a former educator, or has more than ten years working in the K-12 sector.
4. To analyze the interview qualitative data, the individual IBM interview teams reviewed the notes from each of their interviews, recording trends, themes and gaps related to implementation of the Learning and Technology Policy Framework. IBM non-interview staff also reviewed the notes from each interview to record trends, themes and gaps. The interview teams and the non-interview teams then met to compare and discuss their findings, resulting in the final analysis of the quantitative data.
5. The school authority responses to the interview questions were not literally transcribed, but were summarily translated by the three interview recorders in order to be sensitive to the respondents, protect their privacy and to encourage open, frank



discussion. Only three interview teams were used in order to increase the consistency of the interviews and to reduce the possibility of translation bias.

6. An authority specific report for each participating school authority was produced. These reports include a presentation of the qualitative and quantitative data collected from their school authority, as well as a summary of the provincial survey results. As participation was voluntary, only school authorities that participated in both phases of the project were eligible to receive this report.
7. Based on the quantitative and qualitative data collected, a final report outlining the findings from both phases of the project and a summary report to be used for presentation purposes was generated. These reports include:
 - i. An analysis of the qualitative and quantitative data collected; and
 - ii. An identification of trends, themes, and a gap analysis related to implementation of the Learning and Technology Policy Framework.

The results of all online survey questions are found in Appendix A of this report.

Definitions and Notes for Tables and Bar Graphs

- SA Leaders = School Authority Leaders
- ET Leaders = Educational Technology Leaders
- IT Leaders = Information Technology Leaders
- Percentage response numbers have been rounded to the nearest whole number. Therefore the total of all responses from a single group may not always equal 100%.

Acknowledgements

Many staff from Alberta Education, the Alberta Education School Technology Branch and the school authorities across the province contributed their time, feedback and suggestions throughout this process. This involved preparation time, attending meetings or interviews and completing surveys. IBM is very appreciative of the efforts and thoughtful insights that all participants provided, which contributed significantly to this baseline technology assessment.

Special thanks are extended to the leadership teams of the School Technology Branch and the school authorities who provided invaluable support and assistance throughout this engagement.



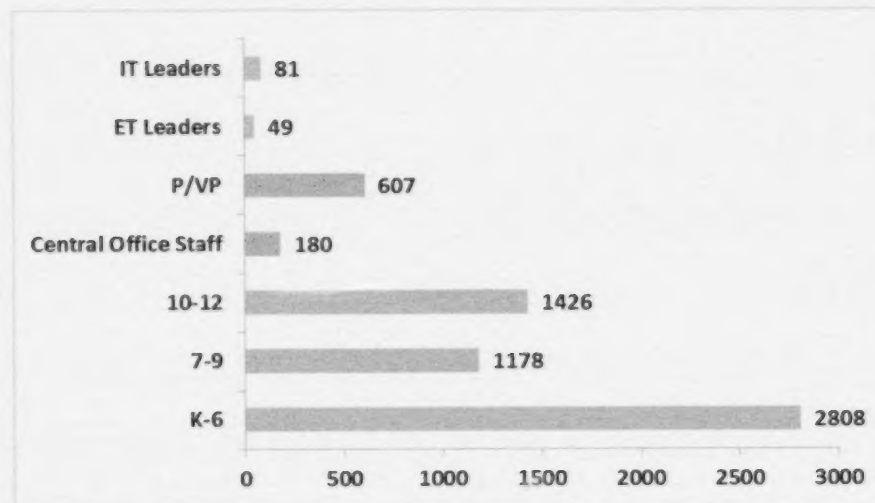
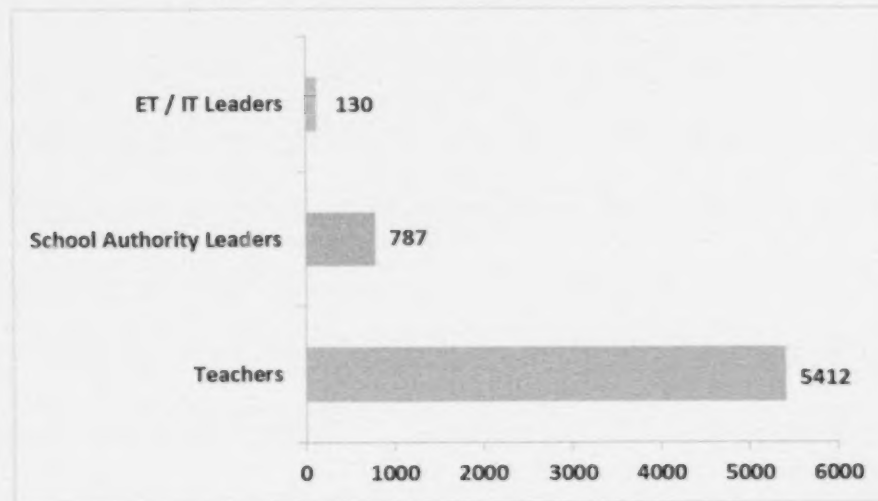
Provincial Online Survey Participation

This section of the report shows the participation rates of the various stakeholder groups across the province for the Phase I online surveys.

Only those respondents who fully completed a survey are being reported on throughout this report. Data from partially completed surveys are not included.

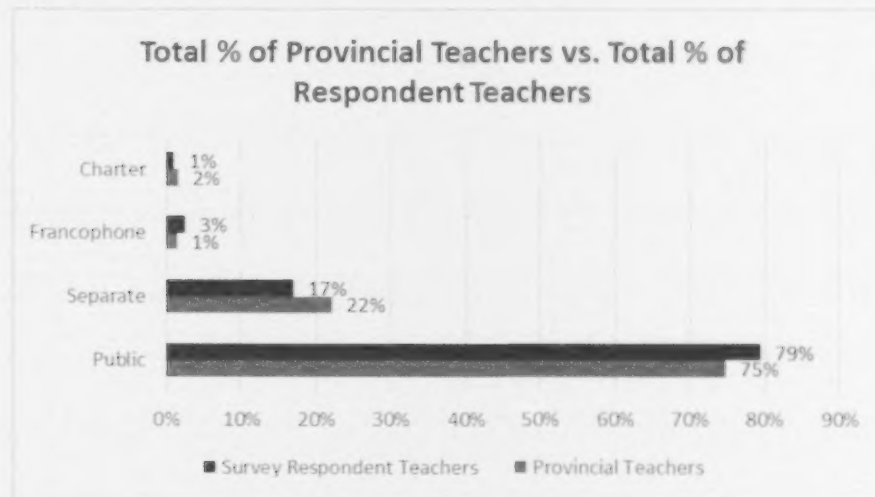
Total Number of Provincial Survey Respondents by Group

The chart below represents the total number of respondents in each group.



Actual Percentage of Provincial Teachers vs. Percentage of Respondent Teachers

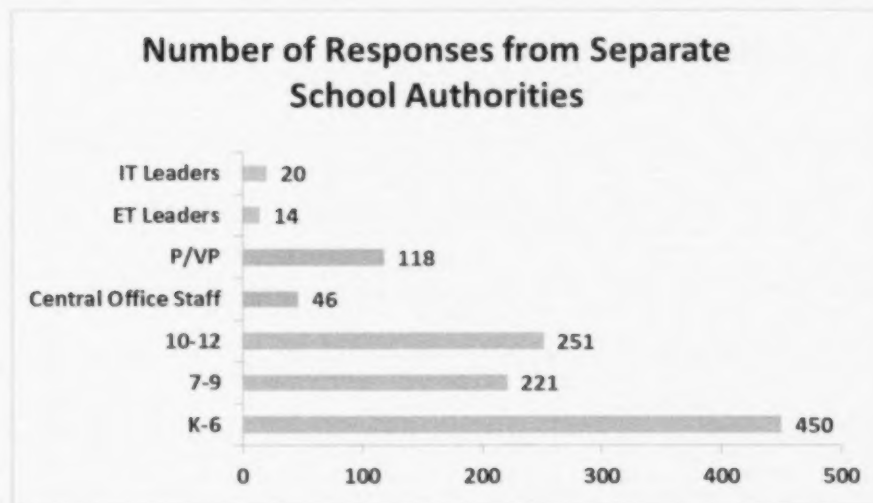
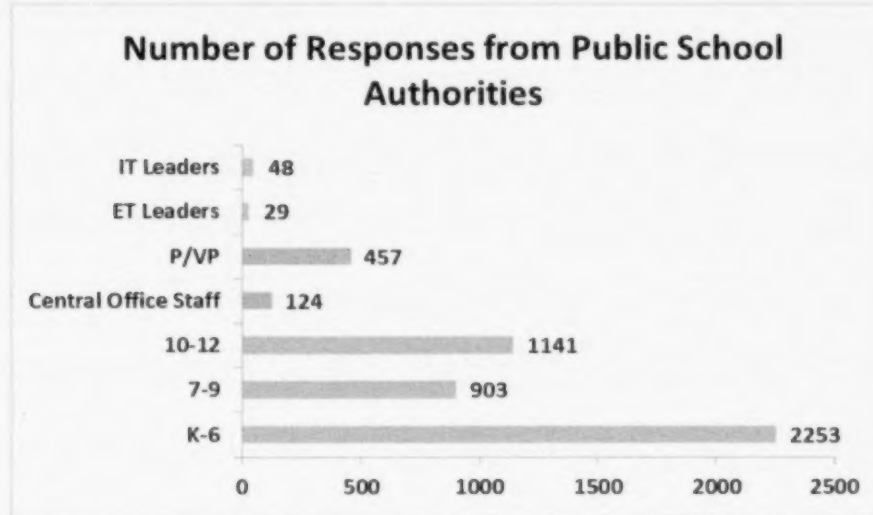
Using the charter schools as an example, the following chart is read as: Charter school teachers represent 2% of all provincial teachers, and 1% of the total survey respondents were Charter school teachers. This shows the degree to which the distribution of survey respondents is aligned with the total distribution of teachers in the province.



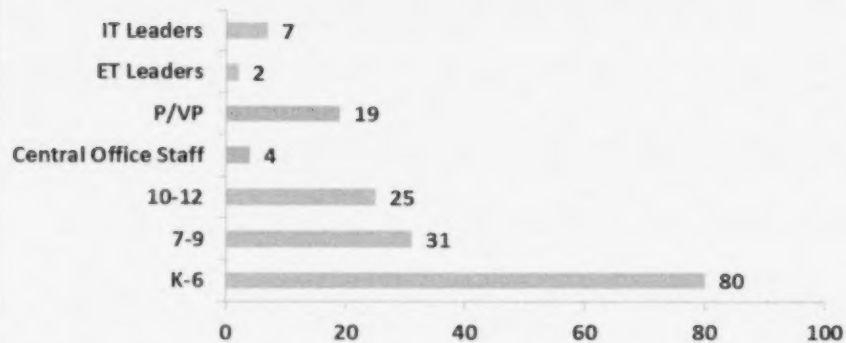
NOTE: The total number of provincial School Authority Leaders and ET/IT Leaders is not known, therefore an analysis of these groups vs. their corresponding survey respondents is not possible.



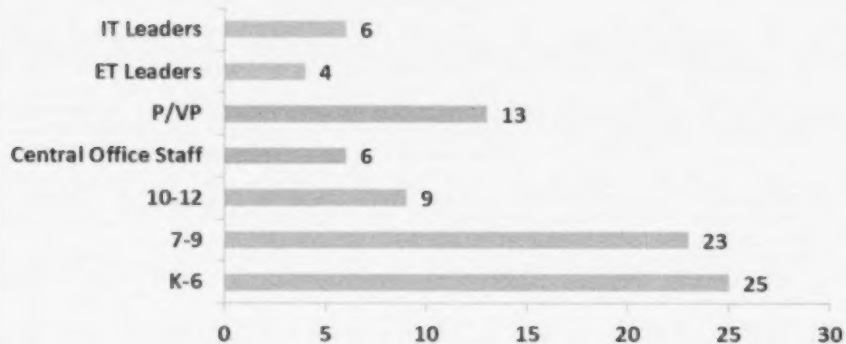
Total Number of Survey Respondents by Position and School Authority Type



Number of Responses from Francophone School Authorities



Number of Responses from Charter School Authorities





General Themes Related to the Learning and Technology Policy Framework

The following general themes, related to the overall Learning and Technology Policy Framework (LTPF) document, were identified through the review and analysis of the data gathered in both phases of this Baseline Technology Assessment:

School Authority Awareness of the LTPF

1. 100% of school authorities interviewed were aware of the LTPF.
2. School authorities received their initial introduction of the LTPF through meetings conducted by Alberta Education.
3. Interview responses indicate that 95% of school authorities view the LTPF as a sound strategic direction to help achieve the vision of Inspiring Education, and feel that the five Policy Directions cover all the components necessary for the innovative and effective use of technology in K-12 schools.

School Authority Alignment with the LTPF

1. While interview responses indicate that approximately 80% of school authorities are just beginning to specifically apply the LTPF to their planning, 68% indicated they feel their current technology plans have been trying to move towards Student-Centred Learning (Policy Direction 1) and increasing their access and improving their Infrastructure (Policy Direction 5) for a number of years.
2. With respect to Policy Direction 2: Research and Innovation, Policy Direction 3: Professional Learning and Policy Direction 4: Leadership, interview responses indicate 68% of school authorities feel the LTPF is not radically different from what they have been trying to accomplish in recent years. As a result, even though they are just beginning to specifically apply the LTPF to their planning, they feel their current technology plans are generally aligned with the directions of the LTPF.
3. 82% of school authority interview responses view student-centred learning as the overall goal, with Policies 2 through 5 as the means to achieving the goal.
4. Interview responses indicate that 73% of school authorities report moving away from creating separate technology plans, and are now incorporating their technology directions within their overall education plans and goals. This has helped education needs drive technology rather than technology driving education, which was much more prevalent in the past.
5. While 95% of school authority interview responses indicated the LTPF provides a sound foundation upon which to address technology within the needs of education, 61% feel there is still a significant amount of work to be done to achieve student-centred learning.



School Authority Top Goals by LTPF Policy Direction

During the interviews, school authorities were asked to identify their "top three goals to make better use of technology, to help move towards greater alignment with the LTPF."

School authorities were not asked to prioritize their goals, just to list them.

The following five tables indicate the number of school authorities who included each of the reported goals as one of their top three goals. As an example, 22 school authorities included student-centred learning as one of their top three goals, and 63% of interviewed school authorities included a goal that was related to Policy Direction 1.

Policy Direction 1 – Student-Centred Learning	
# of School Authorities	Goals as Stated by School Authorities
22	Student-centred learning
8	Student achievement/engagement
4	Communication with parents
4	Digital citizenship
1	Data base of individual student behavior
Total 39 = 63% of interviewed school authorities	

Policy Direction 2 – Research and Innovation	
# of School Authorities	Goals as Stated by School Authorities
3	Research and innovation
Total 3 = 5% of interviewed school authorities	

Policy Direction 3 – Professional Learning	
# of School Authorities	Goals as Stated by School Authorities
49	Professional learning and integration of technology into instruction
3	Culture change
Total 52 = 84% of interviewed school authorities	



Policy Direction 4 – Leadership	
# of School Authorities	Goals as Stated by School Authorities
26	Leadership at the school and central office levels
8	Renew technology plan aligned with LTPF
2	Funding for sustainability
Total 36 = 58% of interviewed school authorities	

Policy Direction 5 – Access, Infrastructure and Digital Learning Environments	
# of School Authorities	Goals as Stated by School Authorities
22	Infrastructure
11	Increase equity and access to technology
8	Bring Your Own Device
4	Increase bandwidth
4	Install wireless in all schools
2	Move to cloud services
1	Shared services
1	Document management
1	Students providing technical support to teachers
1	Implement a digital learning environment
1	Collaboration
1	French resources
Total 57 = 92% of interviewed school authorities	



In summary, the following percentages of interviewed school authorities have a top 3 goal related to each Policy Direction:

LTPF Policy Directions	% of Interviewed School Authorities with a Top 3 Goal Related to LTPF Policy Directions
1 - Student-Centred Learning	63%
2 - Research and Innovation	5%
3 - Professional Learning	84%
4 - Leadership	58%
5 - Access, Infrastructure and Digital Learning Environments	92%



School Authority LTPF Implementation Challenges

Although school authorities are generally in agreement with and aligning themselves to the policy directions of the LTPF, they also identified three main challenges to achieving its vision:

1. Limited financial resources to purchase devices and support infrastructure

Interview /Survey Responses:

- a) 84% of school authorities interviewed reported they are struggling to allocate sufficient funds in their budgets to provide the access and infrastructure required for student-centred learning.
- b) 56% of survey responding teachers indicated that the quantity of computers for students is not sufficient.
- c) 59% of survey responding teachers indicated that computers are not available for their students when they need them.
- d) Teacher survey respondents reported that 36% of students use computers daily, 34% of students use computers several times per week, and 30% of students use computers once per week or less. Therefore, 64% of students do not have daily, on demand access to technology, which is essential for student-centred learning.
- e) 59% of survey responding teachers indicated that the Internet speed is adequate for the needs of their students, while 41% responded that it is not adequate. 73% of survey responding ET/IT leaders felt the Internet speed is adequate for the needs of the students, while 27% did not feel it is adequate.

2. Limited time available to plan, organize and execute implementation activities

Interview Responses:

- a) 81% of school authorities indicated they are finding it difficult to find the time they need to fully implement Policy Directions 1 – 4 to the extent necessary to achieve the goal of student-centred learning.



3. Limited resources to provide adequate professional learning to support users and systems

Interview/Survey Responses:

- a) Interview responses indicate that 95% of school authorities feel the most significant area of challenge, outside of access and infrastructure, is that teachers still require significant levels of professional learning related to effectively integrating technology. 86% of interview responses indicate school authorities are struggling to allocate the money, time and resources necessary to provide the required professional learning opportunities.
- b) When asked if they use inclusive technology tools to support students' learning, 21% of survey responding teachers Strongly Agree/Agree, 63% responded Disagree/Strongly Disagree, and 16% responded Don't Know.
- c) 79% of survey responding teachers felt they were innovative in their use of technology, but only 55% of teachers reported having professional learning opportunities in their school aimed at showing teachers how to use technology with their students to meet curriculum requirements.
- d) In the interviews, 15% of school authorities reported that between 5% and 30% of their teachers are innovative and effective in their use of technology. They also indicated many teachers feel overwhelmed about using technology in the classroom, while others consider the use of technology to be optional.



Policy Direction 1: Student-Centred Learning

Policy Direction 1: Student-Centred Learning



"Technology is used to support student-centred, personalized, authentic learning for all students."

The intent of the interview and survey questions that were asked relative to Policy Direction 1: Student-Centred Learning was to determine themes and gaps relative to the school authorities' current progress towards implementing student-centred, personalized, authentic learning for all students.

Policy Direction 1 Findings Themes

Findings Themes	Survey/Interview Support
Student-Centred Learning is the Goal	a) 83% of interviewed school authorities view Policy Direction 1: Student-Centred Learning as the overall goal. Policies 2 through 5 are seen as the means to achieving the goal. Interview Quote: <i>"We believe that technology is a key foundation of Student-Centred Learning."</i>
Student-Centred Learning Exemplars	a) School authorities do not appear to be clear on what student-centred learning should look like in the classroom. They would like a model to follow that is not overly prescriptive but provides options for school authorities to adapt as needed. b) Interview responses indicate 61% of school authorities report having significant work to do on this front and would welcome assistance from Alberta Education. c) 18% of interviewed school authorities indicated they needed exemplars related to student-centred learning. There is a desire for greater understanding related to: 1) What student-centred learning is, and how it looks in an average classroom 2) How teachers change their practice to achieve student-centred learning



	3) What the role of technology is in achieving this goal
Curriculum Alignment with LTPF	a) Interview responses indicate that 23% of school authorities feel that current curriculum needs to be aligned with the LTPF. b) As new curriculum is developed, school authorities would like to see clear connections with the LTPF. c) School authorities would welcome increased direction from the Ministry with respect to more tightly aligning curriculum with digital resources, technology requirements and investments, and the implementation of student-centred learning.
Use of Data to Monitor and Support Student-Centred Learning	a) Survey results indicate 76% of school authority leaders and 69% of ET leaders feel they use data or evidence-based reasoning to monitor student-centred learning. b) 81% of school authority leaders and 69% of ET leaders feel they use data or evidence-based reasoning to support student-centred learning. c) Interview responses indicate that 36% of school authorities would like to be able to consolidate their data down to the student level, in a timely fashion, to directly impact individualized instruction. d) Some interviewees speculated as to whether the province should provide a data system that school authorities could use to consolidate data from disparate systems.
Digital Citizenship	a) When surveyed teachers were asked if they work in a school that promotes digital citizenship, 80% of K-6, 82% of 7-9 and 76% of 10-12 teachers Strongly Agree or Agree. b) 83% of ET leaders Strongly Agree or Agree that students in their school authority apply digital citizenship skills. c) In the interviews, however, 34% of school authorities indicated they are struggling with digital citizenship and were asking for provincial support, particularly related to alignment with curriculum.



LTPF Policy Direction vs. Provincial Current State Gap Analysis

For each policy direction, a gap analysis between the desired LTPF outcomes/recommended actions and the provincial current state is provided in the accompanying tables.

Each LTPF desired outcome is listed on the left side of the tables, and the provincial current state, which indicates whether the school authorities believe the outcomes are currently being met or more work is required to meet the outcomes, are provided on the right side of the tables.

Outcomes/actions with a green background indicate the majority of school authorities believe the outcomes/actions are being met.

Outcomes/actions with a yellow background indicate the majority of school authorities believe more work is required to meet the outcomes/actions.

A small number of LTPF Ministry Actions were not reviewed as part of this assessment. These actions are included for reference and are identified with a grey background.

Graphs from the online survey results are included, where appropriate, in the Provincial Current State sections of the tables to support the analysis. The corresponding survey questions or statements are in bold above each graph, and the survey question numbers are in parentheses.

In the following gap analysis pie chart legends:

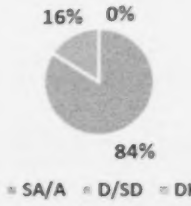
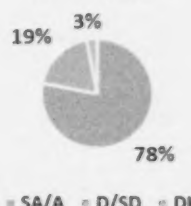
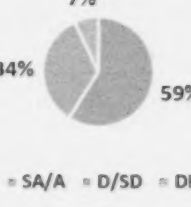
- SA/A represents respondents who Strongly Agree or Agree with the survey question or statement
- D/SD represents respondents who Disagree or Strongly Disagree with the survey question or statement
- DK represents respondents who answered Don't Know to the survey question or statement.

Due to rounding off, percentages may not always add up to 100%.



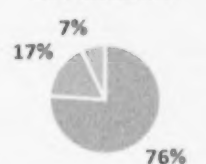
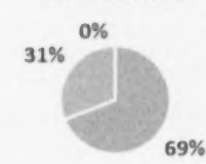
Policy Direction 1 LTPF Outcomes Gap Analysis

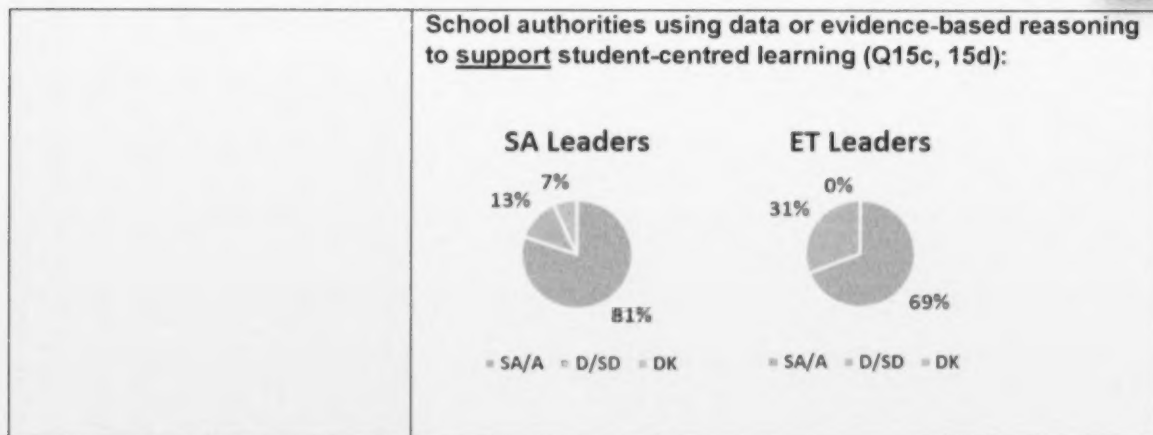
Policy Direction 1: Student-Centred Learning - Outcomes	
Outcome - Students use technology, online learning and digital learning to:	
LTPF Desired Outcome	Provincial Current State
a. access, share and create knowledge	Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Survey Results: Students use technology to access information (Survey questions 2a, 2b): Teachers 95% = SA/A = D/SD = DK ET Leaders 98% = SA/A = D/SD = DK Students use technology to share knowledge (Q7): ET Leaders 88% = SA/A = D/SD = DK

	Students use technology to create knowledge (Q8): ET Leaders  16% 0% 84% SA/A D/SD DK
b. discover, develop and apply competencies across subject and discipline areas for learning, work and life	Survey and interview findings indicate the majority of school authorities feel they are aligned in some areas of this outcome, such as working collaboratively, but need work in other areas such as using technology to solve complex problems. Interview responses indicate 61% of school authorities report having significant work to do on this front and would welcome assistance from Alberta Education. Survey Results: Students use technology to work collaboratively (Q3): Teachers  19% 3% 78% SA/A D/SD DK Students use technology to solve complex problems(Q4): Teachers  7% 34% 59% SA/A D/SD DK



c. develop and apply digital citizenship and technological skills	While the survey results show 71% to 83% alignment with this outcome, interviews indicated 34% of school authorities are struggling with digital citizenship and are asking for provincial support, particularly related to alignment with curriculum. Survey Results: Students use technology to apply digital citizenship skills (Q6,9): Teachers 8% 21% 71% SA/A D/SD DK ET Leaders 14% 2% 83% SA/A D/SD DK
d. demonstrate what they know and are able to do through effectively using a range of resources and media	Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Survey Results: Students use technology to demonstrate what they know using a range of resources and media (Q5): Teachers 17% 2% 81% SA/A D/SD DK Teachers allow their students to demonstrate knowledge using a range of resources and media (Q10e): Teachers 11% 1% 88% SA/A D/SD DK

e. monitor their learning progress and inform decisions through the use of data and evidence-based reasoning	The survey results indicate that the majority of school authorities are using data or evidence-based reasoning to monitor and support student-centred learning. When discussed during the interviews, authorities reported using data from benchmarking and testing sources such as Fountas & Pinnell, Woodcock Johnson, Alberta PAT results and CAT3, as well as teacher formative assessments, but stated that they do not have one single system that is capable of aggregating the data from all their disparate data sources. Interview responses indicate that 36% of school authorities would like to be able to consolidate their data down to the student level, in a timely fashion, to directly impact individualized instruction. Tools that are currently being used to collect data on students include but are not limited to: • Tell Them From Me surveys • Report cards • Attendance records • Demographic data • Student information systems Data collected from these tools is generally not being used to personalize the learning at this time. This data is typically used for school level planning, school reviews and the Accountability Pillar. Survey Results: School authorities using data or evidence-based reasoning to <u>monitor</u> student-centred learning (Q15a, 15b): SA Leaders  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>76%</td> </tr> <tr> <td>D/SD</td> <td>17%</td> </tr> <tr> <td>DK</td> <td>7%</td> </tr> </tbody> </table> ■ SA/A ■ D/SD ■ DK ET Leaders  <table border="1"> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>69%</td> </tr> <tr> <td>D/SD</td> <td>31%</td> </tr> <tr> <td>DK</td> <td>0%</td> </tr> </tbody> </table> ■ SA/A ■ D/SD ■ DK	Category	Percentage	SA/A	76%	D/SD	17%	DK	7%	Category	Percentage	SA/A	69%	D/SD	31%	DK	0%
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DK	0%																



Policy Direction 1 Actions	
Action - School Authorities:	
LTPF Desired Action	Provincial Current State
a. establish a vision for technology-supported, student-centred learning and attainment of competencies for all students in an inclusive K-12 education system.	In the interviews, 73% of school authorities reported moving away from creating separate technology plans and are now incorporating their technology directions within their overall educational goals. This is helping educational needs drive technology rather than technology driving education, which has been much more prevalent in the past. Interview responses indicate that 95% of school authorities feel the LTPF provides a sound foundation upon which to address technology within the needs of education. Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Survey Results: My school authority has a clearly articulated vision for the use of technology for learning (Q1a, 1b, 1c): Teachers 75% 20% 5% SA/A D/SD DK SA Leaders 86% 12% 2% SA/A D/SD DK ET Leaders 81% 17% 2% SA/A D/SD DK



b. develop a coherent alignment for the use of technology across curriculum (i.e., programs of study, assessment, learning and teaching resources), instruction and online and digital learning	Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Survey Results: My school authority has clarity in the policies/procedures that govern educational uses of technology (Q36a, 36b): SA Leaders 81% 16% 3% SA/A D/SD DK ET Leaders 81% 17% 2% SA/A D/SD DK
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Action - Ministry of Education:	
a. aligns curriculum (i.e., programs of study, assessment, learning and teaching resources), workforce planning and professional standards, digital resources, technology investments and other key initiatives with the five policy directions	Interview responses indicate that 23% of school authorities feel that current curriculum needs to be aligned with the LTPF. As new curriculum is developed, school authorities would like to see clear connections with the LTPF. School authorities would welcome increased direction from the Ministry with respect to more tightly aligning curriculum with digital resources, technology requirements and investments, as well as the implementation of student-centred learning.
b. ensures coherence across initiatives, programs and policies of the provincial government regarding technology for learning, teaching, administration and management	
c. provides guidance and support for online and digital learning	Through the interview process, the majority of school authorities indicate this outcome is being met; almost every school authority reported that they have received guidance from the Ministry related to their initial understanding of the LTPF and 95% of school authorities support the Policy Directions of the LTPF. They look forward to continued support related to the LTPF, as well as online and digital learning.



Policy Direction 2: Research and Innovation

Policy Direction 2: Research and Innovation



“Teachers, administrators and other educational professionals read, review, participate in, share and apply research and evidence-based practices to sustain and advance innovation in education.”

The intent of the interview and survey questions related to Policy Direction 2: Research and Innovation, was to determine the degree to which school authorities believe they and the province participate in and apply research and innovation, specifically in the context of educational technology and a digital world.

Policy Direction 2 Findings Themes

Findings Themes	Survey/Interview Support
Data Systems	a) School authorities use a variety of data systems including various student achievement systems. b) Although 79% of survey responding school authority leaders indicate they use data systems or evidence-based reasoning to monitor and support personalized student-centred learning; of ET leaders who responded to the survey, 69% felt the same way. c) Almost every authority reported not using a central tool for warehousing and analysis of data from disparate systems. d) In the interviews, 36% of school authorities indicated that it would be helpful to aggregate their student data into a single, provincial data warehouse, where their data can be stored and analyzed in a timely fashion in order to positively impact classroom instruction. Interview Quote: <i>“We need a process to pull data apart and make the invisible, visible.”</i>



Use of Data	a) During the interviews, school authorities indicated they are not always sure how their data is used, particularly at the school level. b) At the school authority level, data based assessments are not being used to influence instruction, but at the school level there are varying degrees of how data influences instruction, often depending on the level of leadership from the principal or initiative from individual teachers.
Assessment of Technology Effectiveness	a) In the interviews, 34% of school authorities indicated they are not tracking the effectiveness of technology or the progress they are making in their use of technology. These school authorities were not clear on what should be assessed.
Staying Current with Research	a) 80% of survey responding teachers, 94% of survey responding school authority leaders, and 96% of survey responding ET leaders report staying current with educational technology research.
Provincial Support for Research	a) 81% of survey responding school authority leaders and 91% of survey responding ET leaders report they work in a province where educational technology research is supported.
Targeting Investments to Areas of Greatest Effectiveness and Need	a) The Innovative Classrooms grant, a three-year program initiated in 2008, was well received. The grant provided school authorities with funding to help ensure every classroom included an instructional computer and a data projector and/or electronic whiteboard. b) If a similar program was to be initiated, school authorities would like greater flexibility in how they may spend funds. c) During the interviews, when asked if there were any other issues they would like to address, 13% of school authorities, indicated that infrastructure sustainability was a challenge. Some school authorities feel challenged to maintain hardware purchased under initiatives like the Innovative Classrooms grants. d) This issue was the third most common issue stated during the interviews when asked to identify other issues of concern, behind shared services at 19% and exemplars of student-centred learning at 18%.



Policy Direction 2 LTPF Outcomes Gap Analysis

Policy Direction 2: Research and Innovation - Outcomes	
Outcome - Teachers, administrators and other education professionals:	
LTPF Desired Outcome	Provincial Current State
a. stay current with educational technology research	Survey findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Given that school authorities feel they are already meeting this outcome, during the interviews, only 5% of school authorities identified research and innovation as one of their top 3 goals. Survey Results: I stay current with educational technology research (Q 20a, 12a, 12b) : Teachers 19% 1% 80% ■ SA/A ■ D/SD ■ DK SA Leaders 6% 0% 94% ■ SA/A ■ D/SD ■ DK ET Leaders 4% 0% 96% ■ SA/A ■ D/SD ■ DK
b. participate in and apply research to learning and teaching	Although school authorities indicate they stay current with educational technology research, as shown in LTPF Desired Outcome a. above, 31% fewer school authority leaders and 22% fewer ET leader respondents indicate they participate in research. Survey Results: As a school authority/ET Leader, I participate in research (Q 13a, 13b): SA Leaders 35% 2% 63% ■ SA/A ■ D/SD ■ DK ET Leaders 26% 0% 74% ■ SA/A ■ D/SD ■ DK

c. use data systems and evidence-based reasoning to monitor and support personalized, student-centred learning

The survey results indicate that the majority of school authorities are using data or evidence-based reasoning to monitor and support student-centred learning. When discussed during the interviews, authorities reported using data from benchmarking and testing sources such as Fountas & Pinnell, Woodcock Johnson, Alberta PAT results and CAT3, as well as teacher formative assessments, but stated that they do not have one single system that is capable of aggregating the data from all their disparate data sources. Interview responses indicate that 36% of school authorities would like to be able to consolidate their data down to the student level, in a timely fashion, to directly impact individualized instruction.

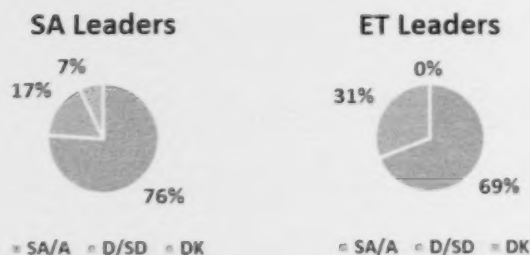
Tools that are currently being used to collect data on students include but are not limited to:

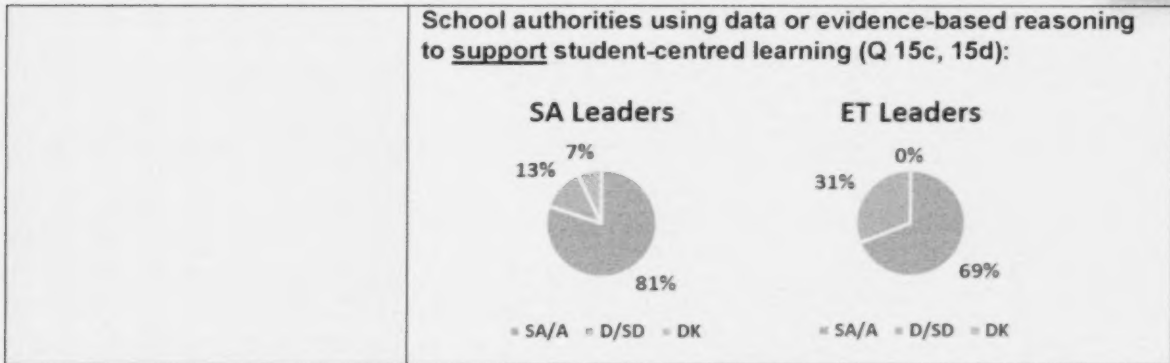
- Tell Them From Me surveys
- Report cards
- Attendance records
- Demographic data
- Student information systems

Data collected from these tools is generally not being used to personalize the learning at this time. This data is typically used for school level planning, school reviews and the Accountability Pillar.

Survey Results:

School authorities using data or evidence-based reasoning to monitor student-centred learning (Q 15a, 15b):





Outcome - In Alberta's education system:	
LTPF Desired Outcome	Provincial Current State
a. educational technology research is supported	Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Survey Results: I work in a province where educational technology research is supported (Q 16a, 16b): SA Leaders 81% 12% 2% ■ SA/A ■ D/SD ■ DK ET Leaders 92% 4% 4% ■ SA/A ■ D/SD ■ DK IT Leaders 89% 3% 7% ■ SA/A ■ D/SD ■ DK I work in a school authority where educational technology research is supported (Q 17a, 17b): SA Leaders 88% 7% 5% ■ SA/A ■ D/SD ■ DK ET Leaders 90% 8% 2% ■ SA/A ■ D/SD ■ DK IT Leaders 90% 6% 4% ■ SA/A ■ D/SD ■ DK

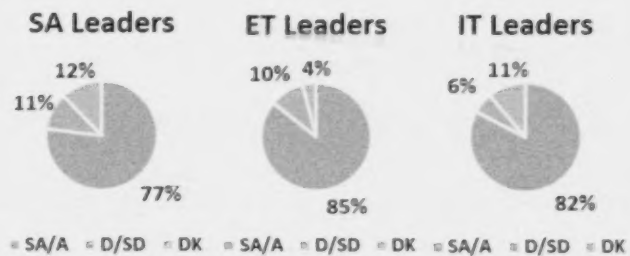


b. decision-making related to technology is informed by data and research

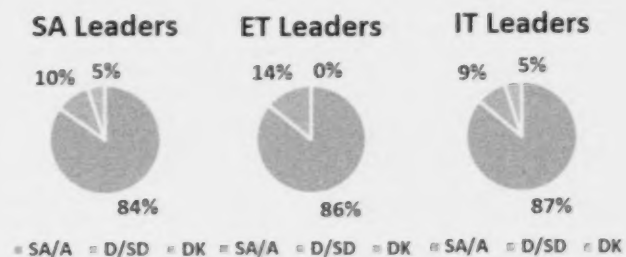
Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome.

Survey Results:

I work in a province where decision making related to educational technology is informed by data/research (Q 16c, 16d):



I work in a school authority where decision making related to educational technology is informed by data/research (Q 17c, 17d):





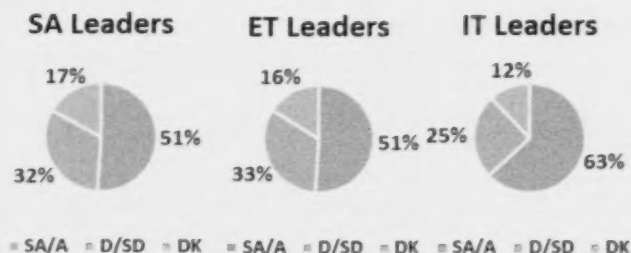
c. technology investments are targeted to areas of greatest effectiveness and need

Survey results indicate that the majority of school authorities feel they are more aligned with respect to technology investments targeted to areas of greatest need than are provincial investments.

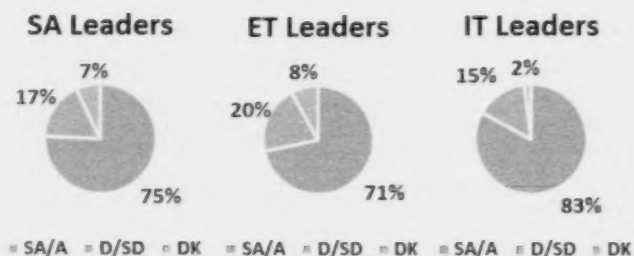
Interview comments indicated that 13% of school authorities identified sustainability as an issue and would like greater flexibility in how they may spend funds made available through programs such as Innovative Classrooms grants.

Survey Results:

I work in a province where educational technology investments are targeted to areas of greatest need (Q 16e, 16f):



I work in a school authority where educational technology investments are targeted to areas of greatest need (Q 17e, 17f):





Policy 2 Actions	
Action – School Authorities:	
LTPF Desired Action	Provincial Current State
a. create cultures of innovation in the use of technology for learning, teaching, management and administration that are informed by research and evidence-based reasoning	Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome for students, teachers and administrators, but still have some work to do with respect to other education professionals. Survey Results: In my school authority we position ourselves as an innovative learning community that uses technology and 21st century learnings to engage (Q 23a, 23b, 23c, 23d): a) students SA Leaders 90% 9% 1% ■ SA/A ■ D/SD ■ DK b) teachers SA Leaders 87% 12% 1% ■ SA/A ■ D/SD ■ DK c) administrators SA Leaders 85% 14% 1% ■ SA/A ■ D/SD ■ DK d) other education professionals SA Leaders 72% 17% 11% ■ SA/A ■ D/SD ■ DK

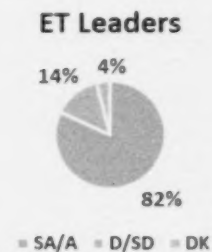
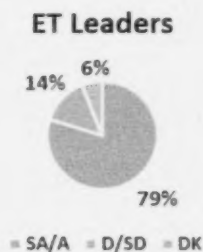
- b. review policies and practices to ensure they support the use of research-based pedagogies, digital resources, support systems and digital learning environments that enable student-centred learning in all schools

Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome.

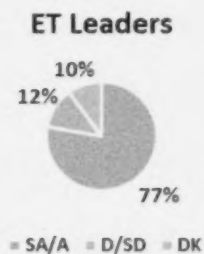
Survey Results:

I review policies that enable student-centred learning in all schools, to ensure they support the use of (Q 32a, 32b, 32c, 32d):

a) research- based pedagogies b) digital resources



c) support systems



d) digital environments



c. encourage, build the capacity of and support teachers, administrators and other education professionals in their review, participation in and application of research related to technology, online learning and digital learning

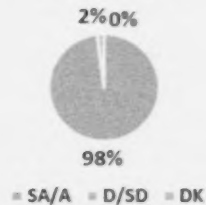
Survey and interview findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome.

Survey Results:

I support the building of teacher capacity through the application of research related to (Q 21a, 21b, 21c):

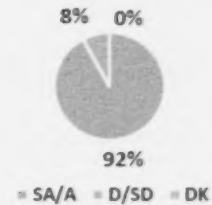
a) technology

ET Leaders



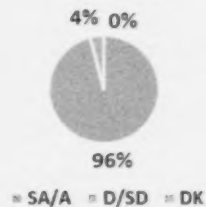
b) online learning

ET Leaders



c) digital learning

ET Leaders





Action – The Ministry of Education:	
LTPF Desired Action	Provincial Current State
a. facilitates collaborative development of research among school authorities and research institutions	This area was not specifically reviewed.
b. facilitates research-based educational technology innovations among school authorities, post-secondary institutions and the provincial government	While the Ministry has facilitated technology innovations in the past, such as Innovative Classrooms grants, and school authorities find value in these initiatives, 13% of interview respondents indicated they would like to have greater flexibility in how these funds are to be allocated to ensure they are meeting their individual needs and purchases are sustainable.
c. supports province-wide exchanges and collaborations related to research and research-based models and practices related to educational technology, online learning and digital learning	Interview findings indicate that the majority of school authorities feel the Ministry is achieving this outcome. School authorities indicated that through the Ministry-led Jurisdiction Technology Contacts (JTC) meetings, they have been introduced to the LTPF and are provided opportunities to exchange ideas and collaborate on educational technology related issues.
d. hosts an online provincial resource for educational technology research	This area was not specifically reviewed.



Policy Direction 3: Professional Learning

Policy Direction 3: Professional Learning



"Teachers, administrators and other educational professionals develop, maintain and apply the knowledge, skills and attributes that enable them to use technology effectively, efficiently and innovatively in support of learning and teaching."

The interview and survey questions related to Policy Direction 3: Professional Learning focused on to what degree respondents' professional learning enabled them to use technology better in their teaching and learning practice, as well as how educators used technology to further their professional learning.

Policy Direction 3 Findings Themes

Findings Themes	Survey/Interview Support
Ongoing Professional Learning is Required	a) As reported in the Policy Direction 1 findings, 83% of school authorities interviewed felt Policy Direction 1: Student-Centred Learning is the overall goal and Policy Directions 2 through 5 are seen as the means to achieving the goal. b) 95% of interviewed school authorities agree that there is a need for ongoing professional learning opportunities to support and develop the capacity of their teachers. School authorities also recognize that there are variations in skill levels of teachers with respect to their acceptance of, understanding of, and ability to use technology effectively in the classroom. Therefore, professional learning must be designed to meet these various needs. c) The need for ongoing professional learning was further supported in the interviews when participants were asked to identify their top 3 goals to better use technology. 84% of school authorities indicated one of their top 3 goals was related to professional learning, second only to the 92% of interviewed school authorities who indicated one of their top three goals was



	related to Policy Direction 5: Access, Infrastructure and Digital Learning Environments. Interview Quote: <i>"Building teacher capacity will ensure sustainability."</i>
Time and Resource Challenges	a) The most significant challenges school authorities face with respect to providing ongoing professional learning opportunities for the staff are: 1) Limited Time: During the interviews, 81% of school authorities indicated that finding the time to release teachers to attend sessions was a significant challenge. Although there are designated days in which training sessions can be delivered, there is a need for more "just in time", "elbow to elbow" sessions where lessons are co-planned and delivered in classrooms with the teacher and their students. 2) Limited Resources: During the interviews, 85% of school authorities indicated they did not have sufficient human resources to provide the required professional learning opportunities, and in particular "just in time" sessions that they feel are very effective. Many authorities have ET staff who are teachers that deliver professional learning, but others do not have these resources. As well, 84% of interviewed school authorities indicate that they struggle to allocate sufficient funds for release time to enable staff to participate in such professional development. School authorities who use ET staff to deliver professional learning speak very highly of the benefit these specialists provide their teachers. The use of ET staff to provide professional learning is supported by teachers. When asked what their preferred models of professional learning are: i. 89% indicated they strongly agreed or agreed with face to face workshops ii. 82% indicated they strongly agreed or agreed with job embedded coaching/mentoring iii. 74% indicated they strongly agreed or agreed with communities of practice



	iv. 49% indicated the strongly agree or agreed with web-based supports such as discussion groups, wikis, webinars or Twitter Interview Quote: <i>"If teachers can collaborate and use technology in their PD, the learning 'sticks'."</i>
Technology Professional Learning is not Always Aligned with Curriculum	a) 63% of teacher survey respondents report that all educational technology professional learning is embedded into broader curriculum initiatives. b) 55% of surveyed teachers report the educational technology professional learning in their school is aimed at showing teachers what tools they need to use with their students to meet the curriculum requirements.
Limited Formal Tracking of the Effectiveness of Professional Learning	a) Although 76% of survey responding school authority leaders report using data/research to ascertain and increase the effectiveness of professional learning programs, in the interviews only 32% of school authorities indicated that this is done in a formal manner and results are not generally compiled year after year to assess progress.
Key Areas of Professional Learning Required	a) Effectively Integrating Technology into Curriculum: During the interviews, 95% of school authorities agreed there is a need for ongoing professional learning with respect to the effective use of technology in the classroom. 15% of interviewed school authorities feel that only about 30% of their teachers are using technology innovatively. b) Use of Inclusive Technology Tools: Survey results indicate 12% to 33% of teachers are using inclusive technology to meet the diverse needs and interests of all students. c) Bring Your Own Device: When discussing BYOD related to access and infrastructure, 52% of interviewed school authorities indicated that teacher comfort levels with respect to effectively using and managing a variety of student devices in their classroom is a significant barrier. d) Awareness of Digital Resources: During the interviews, 21% of school authorities reported having their own digital resource repository. Interviews also revealed that teachers may not be fully aware of some of the digital resources that are already



	available to them at the school authority or Ministry levels. 48% of interviewed school authorities feel there is an opportunity for a single, provincial, cloud based collaboration strategy to allow for the sharing of resources.
New Teacher Technology Integration Skills	a) During the interviews, 11% of school authorities indicated that while new teachers are digitally competent, they do not have the skills to effectively use technology in their instruction. Authorities would like to see more emphasis placed at the university level on the integration of technology with curriculum.



Policy Direction 3 LTPF Gap Analysis

Policy Direction 3: Professional Learning - Outcomes	
Outcome – Digitally confident teachers, administrators and other education professionals:	
LTPF Desired Outcome	Provincial Current State
a. are well prepared to use technology and digital resources innovatively and effectively for learning, teaching, leadership and administration	Although 83% of school authority leaders who responded to the survey indicated their school authority positioned themselves as an innovative learning community, and 79% of school authority leaders and 94% of ET/IT leaders responded that they use technology innovatively, interview comments indicate that 15% of school authorities feel that only approximately 30% of teachers are using technology innovatively.
b. use technology and research to design personalized, authentic and student-centred learning opportunities to meet the diverse needs and interests of all students	Survey results indicate 12% to 32% of teachers are using inclusive technology to meet the diverse needs and interests of all students. Survey Results: Teachers use the following types of inclusive technology tools to support students' learning (Q 11a, 11b, 11c, 11d, 11e): a) Symbol Supported Text b) Text to Speech c) Speech Recognition Teachers 23% 12% 65% SA/A D/SD DK Teachers 10% 32% 58% SA/A D/SD DK Teachers 13% 19% 68% SA/A D/SD DK c) Visual Thinking e) Word Prediction Teachers 19% 20% 61% SA/A D/SD DK Teachers 16% 23% 61% SA/A D/SD DK



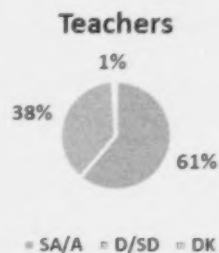
- c. engage in professional growth opportunities that are broadened and diversified through technology, social media and communities of practice

Although 82% of teachers report engaging in professional learning opportunities that involve technology, only 62% report engaging in professional learning opportunities that involve social media or online communities of practice.

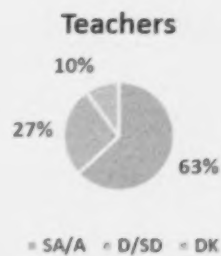
63% of teachers report that all educational technology professional learning is embedded into broader curriculum initiatives.

Survey Results:

As a teacher I engage in professional learning opportunities that involve social media or online communities of practice (Q 31b):



In my school, all educational technology Professional Learning is embedded into broader curriculum initiatives (Q 25a):





Policy Direction 3 Actions																	
Action – School Authorities:																	
LTPF Desired Action	Provincial Current State																
a. use data and research to inform the design of professional programs and to ascertain and increase the effectiveness of such programs in making progress toward local goals and priorities	Although survey results indicate 75% of school authorities are using data/research to design and track the effectiveness of their professional learning (PL) programs, in the interviews only 32% of school authorities indicated that the tracking of professional learning effectiveness was done formally. Longitudinal tracking of the effectiveness of PL on student outcomes is not a common practice. Survey Results: In my school authority we use data/research to track the effectiveness of professional learning programs in making progress towards local goals and priorities (Q 18a): SA Leaders <table border="1"> <caption>SA Leaders - Q 18a</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>75%</td> </tr> <tr> <td>D/SD</td> <td>16%</td> </tr> <tr> <td>DK</td> <td>9%</td> </tr> </tbody> </table> In my school authority we use data/research to ascertain and increase the effectiveness of professional learning programs in making progress towards local goals and priorities (Q 18b): SA Leaders <table border="1"> <caption>SA Leaders - Q 18b</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>76%</td> </tr> <tr> <td>D/SD</td> <td>16%</td> </tr> <tr> <td>DK</td> <td>8%</td> </tr> </tbody> </table>	Response	Percentage	SA/A	75%	D/SD	16%	DK	9%	Response	Percentage	SA/A	76%	D/SD	16%	DK	8%
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- b. use technology to provide options in the type, duration, pedagogy, location, medium and formality of professional development and to differentiate, within professional development offerings, to meet teacher-participants' needs while also achieving local goals and priorities

The school authority interviews contradict the survey results related to this outcome.

In the interviews, 48% of school authorities indicated that they use technology to differentiate professional learning and very few school authority leaders felt that technology-delivered PL was effective with their teachers. There was a much greater demand for one-on-one, face-to-face PL, which is reported to be very effective.

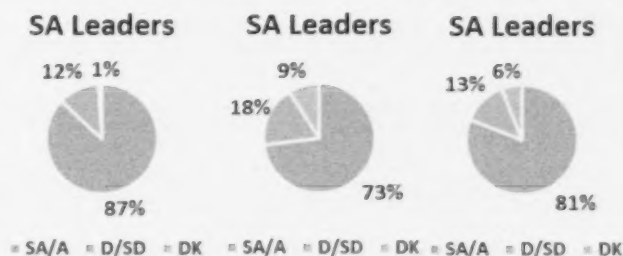
73% to 87% of survey responding school authority leaders indicated they are using technology very well to provide PL options

There was some positive feedback about Twitter, but webinars are viewed as very challenging.

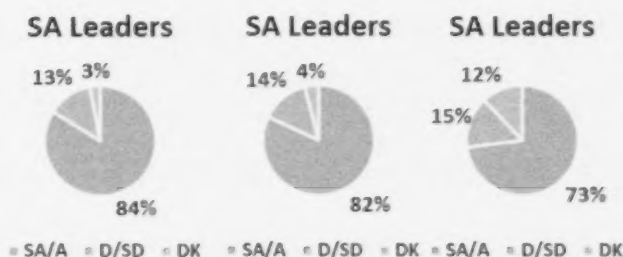
Survey Results:

In my school authority we use technology to provide options in the (Q 24a, 24b, 24c, 24d, 24e, 24f):

a) type of PL b) duration of PL c) pedagogy of PL



d) location of PL e) medium of PL f) formality of PL





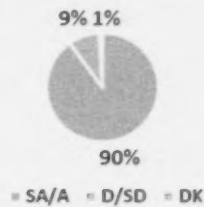
c. position the school as an innovative learning community that uses technology to engage students, teachers, administrators, other education professionals and their community in 21st century learning

Survey findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome, but some effort is still required with other education professionals.

In my school authority we position ourselves as an innovative learning community that uses technology and 21st century learnings to engage (Q 23a, 23b, 23c, 23d):

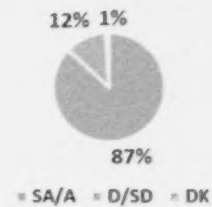
a) students

SA Leaders



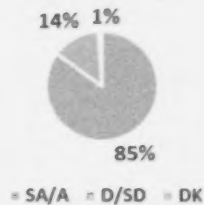
b) teachers

SA Leaders



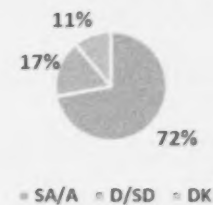
c) administrators

SA Leaders



d) Other Education Professional

SA Leaders





Action – The Ministry of Education:	
LTPF Desired Action	Provincial Current State
a. ensures that the professional standards for teachers and administrators reflect the five policy directions in the Learning and Technology Policy Framework	While the majority of interviewed school authorities agree that the Ministry is dedicated to working with authorities and teachers to attain the goals of the LTPF, there is still a concern among school authority leaders that some teachers consider technology as an optional element, and therefore choose not to integrate it into their teaching. School authorities would like more assistance from the Ministry related to a scope and sequence for ICT skills.
b. works with post-secondary institutions and teacher preparation programs to achieve alignment with the Learning and Technology Policy Framework across the province	11% of interviewed school authorities report that while new teachers are digitally competent, they do not have skills related to effectively using technology in their instruction. Authorities would like to see more emphasis placed on this at the university level.



Policy Direction 4: Leadership

Policy Direction 4: Leadership



“Education leaders establish policy and governance structures, cultivate innovation and build capacity within the system to leverage technology in support of student-centred learning and system efficiencies.”

The interview and survey questions related to Policy Direction 4: Leadership, focused on the plans, policies and governance related to technology in the school authority. The questions also asked about goals and leadership activities currently planned to better align with the LTPF.

Policy Direction 4 Findings Themes

Findings Themes	Survey/Interview Support
Technology Planning	a) Technology plans come in many different forms, from a strict IT plan, to a plan to embed technology in learning. 73% of interviewed school authorities indicated that they have a current technology plan. Fewer school authorities are creating a separate technology plan, as 73% of interviewed school authorities indicate they are integrating their technology planning into their overall school authority improvement plans, or even through their administrative procedures, as these can be more easily changed. b) 65% of interviewed school authorities indicate that their technology planning is moving from a focus on equipment to a focus on integration with curriculum. c) The evergreening of technology and its related financing is mentioned as a challenge in 84% of interviewed school authorities. d) Where there is a technology plan, 75% of interviewed school authorities indicated that it has been developed with the involvement of a cross-section of stakeholders, including educators. e) In the survey responses, 76% of teachers, 86% of school authority leaders and 82% of ET/IT leaders report that their



	school authority has a clearly articulated vision for the use of technology for learning. Interview Quote: <i>"Before buying technology, we now ask what are we going to buy, do we really need it and how will we use it?"</i>
School Authority Alignment with LTPF	a) In the interviews, 68% of school authorities stated that they feel they are already working in the direction of the LTPF and 95% of school authorities indicated they are supportive if its direction.
Curriculum Alignment with LTPF	a) Interview responses indicate that 23% of school authorities feel that current curriculum needs to be aligned with the LTPF. b) As new curriculum is developed, school authorities would like to see clear connections with the LTPF. c) School authorities would welcome increased direction from the Ministry with respect to more tightly aligning curriculum with digital resources, technology requirements and investments, and the implementation of student-centred learning.
Principal Leadership is Essential	a) In the interviews, 73% of school authorities indicated that leadership from the school principal is a key element in supporting the directions of the LTPF. They feel principals must be comfortable with modeling the effective and efficient use of technology. School authorities agree that this will require professional learning for the principals, and they emphasize the importance of establishing a method of sharing information and resources across the province.

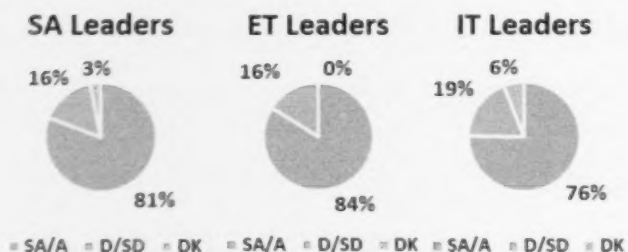


Policy Direction 4 LTPF Gap Analysis

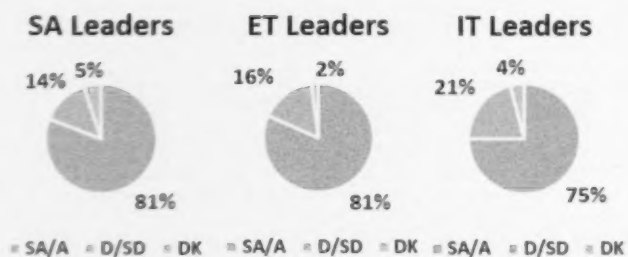
Policy Direction 4: Leadership – Outcomes	
Outcome – Education leaders at all levels champion effective and innovative uses of technology for all schools. As a result:	
LTPF Desired Outcome	Provincial Current State
a. government and school authorities have clarity and coherence in the policies and procedures that govern educational and administrative uses of technology in all schools	Survey results below indicate that school authorities believe they have greater clarity in their policies/procedures that govern educational and administrative uses of technology than does the Ministry. Interview responses indicate that 23% of school authorities feel that current curriculum needs to be aligned with the LTPF Survey Results: The Ministry has clarity in the policies/procedures that govern educational uses of technology in all schools (Q 34a, 34b): SA Leaders 14% 23% 63% ET Leaders 8% 20% 71% IT Leaders 16% 20% 65% ■ SA/A ■ D/SD ■ DK ■ SA/A ■ D/SD ■ DK ■ SA/A ■ D/SD ■ DK The Ministry has clarity in the policies/procedures that govern administrative uses of technology in all schools(Q 35a, 35b): SA Leaders 15% 26% 59% ET Leaders 10% 22% 67% IT Leaders 17% 25% 58% ■ SA/A ■ D/SD ■ DK ■ SA/A ■ D/SD ■ DK ■ SA/A ■ D/SD ■ DK



My school authority has clarity in the policies/procedures that govern educational uses of technology in all schools (Q 36a, 36b):



My school authority has clarity in the policies/procedures that govern administrative uses of technology in all schools (Q 37a, 37b):



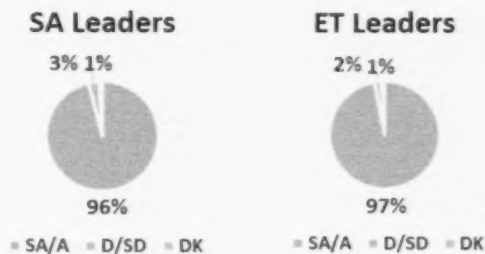


b. teachers, administrators and other education professionals use technology innovatively, effectively and efficiently

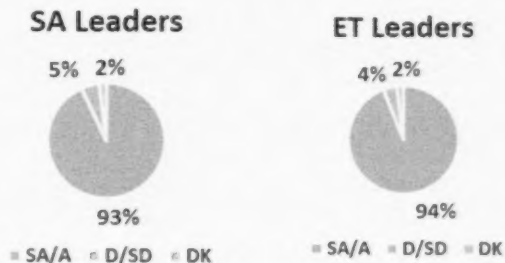
Although an average of 96% of survey responding school authority and ET/IT leaders indicate they champion the innovative and effective use of technology for learning, as shown in the graphs below, interview comments indicate 15% of school authorities feel that no more than 30% of teachers are using technology innovatively and effectively.

Survey Results:

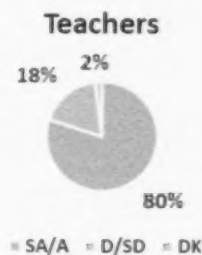
In my school authority, I champion effective use of technology for learning (Q 33a, 33b):



In my school authority, I champion innovative use of technology for learning (Q33c, 33d):



As a teacher, I use technology to solve complex problems (Q 10d):





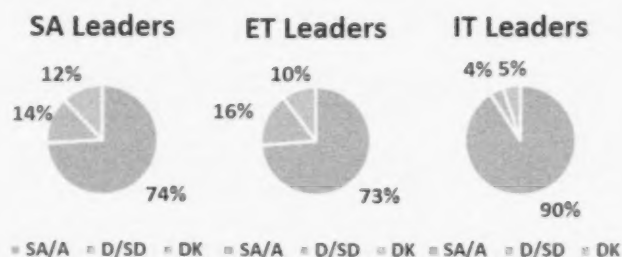
c. economies of scale that achieve cost effectiveness and efficiencies in educational technology are realized

While the LTPF lays the groundwork to have all school authorities working in the same direction, and initiatives such as Education Standing Offers for the purchase of technology hardware and software offer economies of scale, there remains an ongoing question as to whether the Ministry should be providing standard tools. For example:

- 48% of interviewed school authorities feel there is an opportunity for a single, provincial, cloud-based collaboration strategy to allow for the sharing of resources in a standard, searchable format.
- 35% of interviewed school authorities indicated they would like to aggregate all their student data into one location, like a data warehouse to monitor and support student-centred learning. They feel a provincial solution could meet the needs of the majority of school authorities.
- 24% of interviewed school authorities would like to move to digital textbooks.
- 15% of interviewed school authorities feel there should be a provincial student information system.
- 5% of interviewed school authorities feel there should be a provincial, web-based IPP standard.
- 2% of interviewed school authorities indicate there should be a standard provincial report card.

Survey Results:

My local authority realizes economies of scale that achieve cost efficiencies in educational technology are realized in my local authority (Q 38a, 38b):





- d. up-to-date guidelines and standards on uses of technology inform school authority education plans

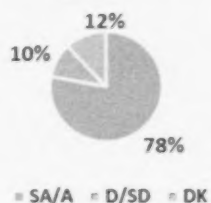
Although 78% of school authority leader survey respondents report using the LTPF to inform school authority education plans, during interviews, 68% of school authorities felt that their current technology plan is aligned with the LTPF.

In the interviews, however, the majority of school authorities reported that they feel they are more at an awareness level in their understanding and application of the LTPF.

Survey Results:

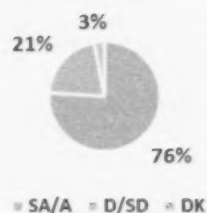
My school authority uses the Learning and Technology Policy Framework to inform school authority education plans (Q39):

SA Leaders



I work in a school that remains current in terms of technology trends that impact education (Q 53d):

Teachers





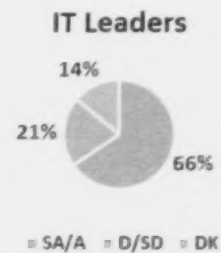
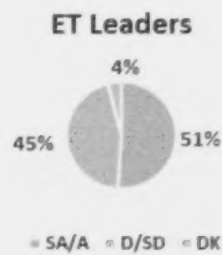
Policy Direction 4 Actions	
Action – School Authorities:	
LTPF Desired Action	Provincial Current State
a. incorporate into their planning systemic, innovative and effective uses of technology to support learning, teaching, administration and management, and regularly assess progress in this regard	68% of survey responses from ET and IT leaders indicate school authorities regularly assesses progress in the use of technology to support learning, teaching, administration and business administration. During the interviews, 34% of school authorities indicated that they regularly assess progress in their use of technology. Survey Results: My school authority regularly assesses progress in the use of technology to support (Q 49a, 49b, 49c, 49d): a) student learning ET Leaders 33% 2% 65% ■ SA/A ■ D/SD ■ DK IT Leaders 12% 15% 73% ■ SA/A ■ D/SD ■ DK b) teaching ET Leaders 31% 2% 67% ■ SA/A ■ D/SD ■ DK IT Leaders 15% 15% 70% ■ SA/A ■ D/SD ■ DK



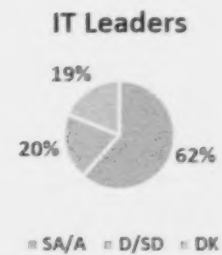
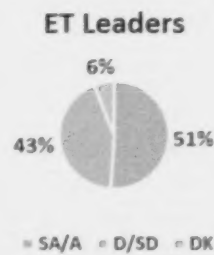
	c) educational administration ET Leaders 8% 26% 65% ■ SA/A ■ D/SD ■ DK IT Leaders 15% 17% 68% ■ SA/A ■ D/SD ■ DK d) business administration ET Leaders 14% 20% 65% ■ SA/A ■ D/SD ■ DK IT Leaders 14% 21% 66% ■ SA/A ■ D/SD ■ DK
b. update technology plans for systemic, community-based approaches to student-centred, personalized, authentic learning and support implementation in all schools	Survey results indicate more work is needed in developing and updating technology plans for systemic, community-based approaches to student-centred, personalized, authentic learning. Survey Results: My school authority has clearly developed technology plans for systemic, community-based approaches (Q 50a, 50b, 50c): a) student-centred learning ET Leaders 2% 37% 61% ■ SA/A ■ D/SD ■ DK IT Leaders 14% 19% 68% ■ SA/A ■ D/SD ■ DK



b) personalized learning

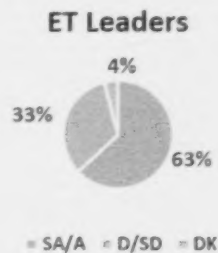


c) authentic learning



My school authority updates their technology plans for systemic, community-based approaches to (Q 51a, 51b, 51c):

a) student-centred learning

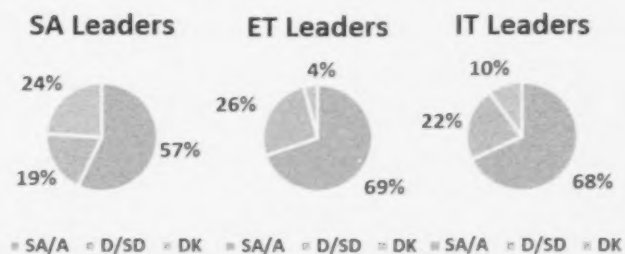




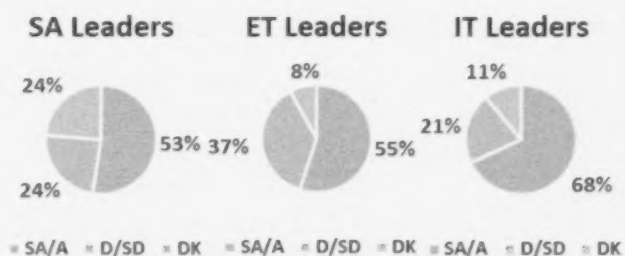
	b) personalized learning ET Leaders 41% 55% 4% ■ SA/A ■ D/SD ■ DK IT Leaders 15% 69% 16% ■ SA/A ■ D/SD ■ DK c) authentic learning ET Leaders 35% 59% 6% ■ SA/A ■ D/SD ■ DK IT Leaders 16% 65% 19% ■ SA/A ■ D/SD ■ DK
c. seek out and participate in partnership opportunities (e.g., cross- jurisdiction, cross-institution, community, industry) that support innovative use of technology	Survey results indicate there is a greater involvement in partnerships at the ET/IT leader level than there is at the school authority leader level. Survey Results: My school authority seeks out partnership opportunities to support innovative use of technology with (Q 40a, 40b, 41a, 41b, 42a, 42b, 43a, 43b): a) cross-jurisdictions SA Leaders 25% 55% 20% ■ SA/A ■ D/SD ■ DK ET Leaders 18% 69% 12% ■ SA/A ■ D/SD ■ DK IT Leaders 12% 75% 12% ■ SA/A ■ D/SD ■ DK



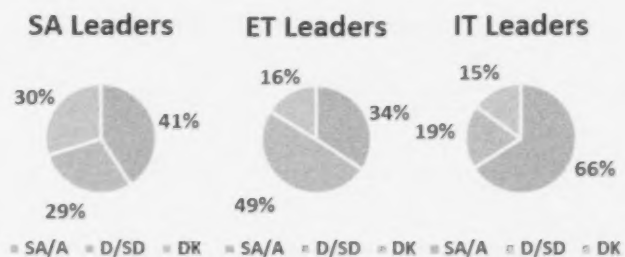
b) cross-institutions



c) communities



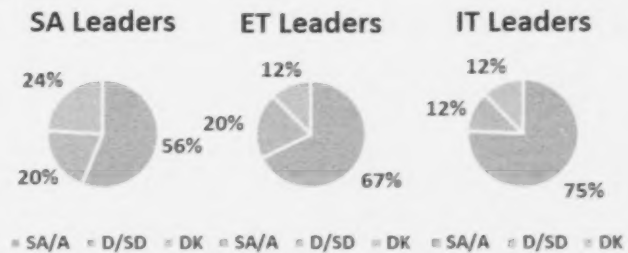
d) industry



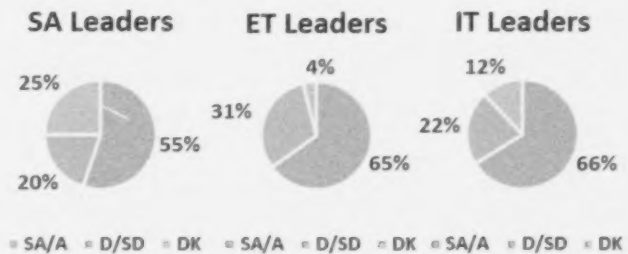


My school authority participates in partnership opportunities to support innovative use of technology with(Q 45a, 45b, 46a, 46b, 47a, 47b, 48a, 48b):

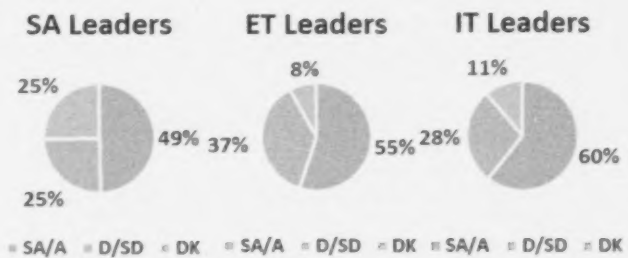
a) cross-jurisdictions

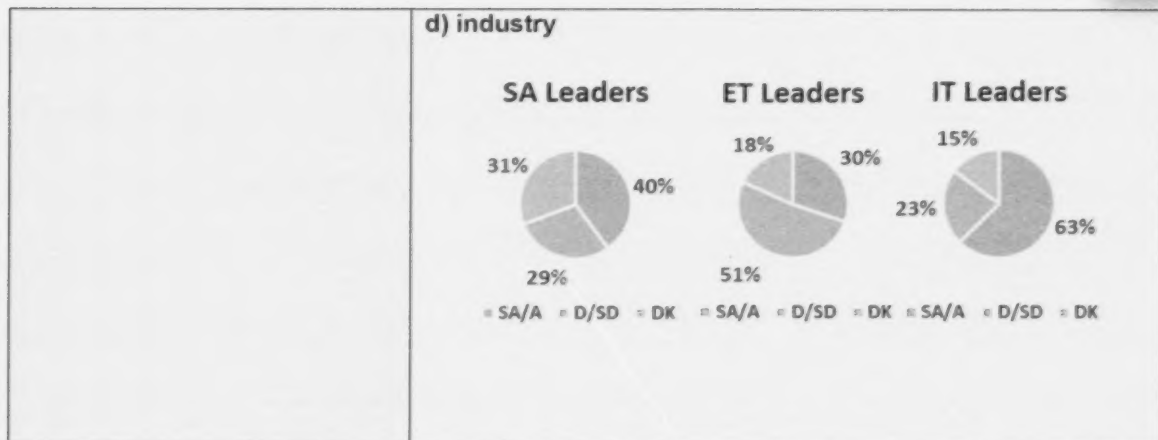


b) cross-institutions



c) communities





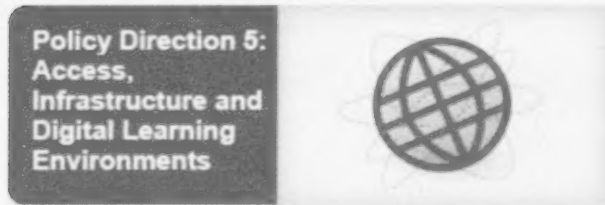
Action – The Ministry of Education:	
LTPF Desired Action	Provincial Current State
a. provides support for school authorities in revising education plans and technology plans to reflect the five policy directions	While this area was not specifically reviewed, school authorities did indicate their appreciation for the Ministry's role in providing information related to the LTPF to school authorities, particularly through the JTCs and the sessions with Galileo.
b. guides capital planning in such areas as school construction, modernization, purchasing and infrastructure investments to ensure that technology innovations are considered vehicles to achieving local goals and priorities	This area was not specifically reviewed.
c. facilitates and participates in partnership opportunities (e.g., cross-jurisdiction, cross-institution, community, industry)	This area was not specifically reviewed.



d. establishes and updates guidelines and procedures for technology uses, such as online learning and digital resources/ content, in order to create opportunities for school authorities to jointly develop, exchange, aggregate and share online offerings	This area was not specifically reviewed.
e. provides opportunities for consultation, dissemination of information, and collaboration on educational and information technologies	While this area was not specifically reviewed, school authorities did indicate their appreciation for the Ministry's role in providing information related to the LTPF to school authorities, particularly through the JTC event and the sessions with Galileo.



Policy Direction 5: Access, Infrastructure and Digital Learning Environments



"All students, teachers, administrators and other education professionals have access to appropriate devices, reliable infrastructure, high-speed networks and digital learning environments."

The Policy Direction 5 portion of the interviews and surveys was focused on determining the extent to which all students, teachers, administrators and other education professionals have the necessary access and infrastructure to enable the desired digital learning environment and the other 4 Policy Directions. This included data collection on what currently existed, as well as what was required, what barriers existed and suggestions to overcome these.

Policy Direction 5 Findings Themes

Findings Themes	Survey/Interview Support
Policy 5 is the Key to Success of All the Other Policies	a) Interview responses indicate that 82% of school authorities view student-centred learning as the overall goal, and 57% of school authorities believe access to technology, infrastructure, and digital learning environments are the keys to achieving that goal. b) This 57% of interview responding school authorities feel that challenges in achieving Policy Direction 5 is the main barrier to success in the other four policy directions.
Budget Limitations	a) 84% of interviewed school authorities indicated that they struggle to allocate sufficient funds to achieve the level of access and infrastructure required to fully implement the LTPF in a sustainable manner. b) They feel that any targeted funding from the Ministry must consider sustainability and evergreening, and not be one-time funding. For example, 8% of interviewed school authorities reported a challenge allocating funds to maintain or replace aging hardware, some of which was purchased with Innovative Classrooms grants.



Access to Technology	
Insufficient Student Access to Technology	a) There is a belief that without one-to-one student access, or close to it, student-centred learning is not attainable. b) 56% of teacher survey responses indicate that there are not enough computers for their students, and 59% of survey responding teachers say the computers are not available when their students need them. c) As a result, survey responding teachers report that 30% of their students use technology once a week or less, 34% use technology several times per week, and 36% use technology once per day or several times per day. Interview Quote: <i>"There is a deep belief that technology should be available for students to accomplish whatever task is at hand. Students and teachers should not have to go to a computer lab. The tool should be at their fingertips and just work when needed."</i>
Student Access Models Vary	a) Although specific numbers of computer labs and laptop carts were not collected, interview comments indicate that these computers are available for student use in a variety of models throughout the province, including computer labs, laptops on carts, and tablets for one-to-one or small group use.
Bring Your Own Device (BYOD) is Emerging	a) 57% of survey responding teachers indicated that their school supports BYOD for students, 30% indicated their schools did not support BYOD, and 13% of surveyed teachers did not know. b) There is a diverse landscape ranging from one school authority that is requiring all students in specific grades to bring a device, to other school authorities that do not allow BYOD at all, mainly due to concerns related to equity, potential classroom management issues, teacher comfort level, the impact on bandwidth, or a lack of policies in place to support BYOD. c) 52% of interviewed school authorities felt their teachers' comfort levels with respect to managing a variety of student devices in their classrooms was an issue.
Teacher Access	a) 95% of survey responding teachers report having access to devices



	b) 65% of survey responding teachers report having exclusive access to a school authority supplied mobile electronic device (i.e., laptop, tablet or iPad).
Types of Devices	a) School authorities report that 45% of their devices are laptops, 42% are desktop computers and 13% are tablets.
Infrastructure	
SuperNet is Highly Valuable	a) 88% of IT survey respondents indicate SuperNet is reliable, 92% believe it is secure, and 94% see it as valuable to their school authority. Interview Quote: <i>"SuperNet has been incredibly valuable because it has been so stable."</i>
SuperNet Challenges	a) 50% of survey responding IT leaders report SuperNet meets their bandwidth needs, while 65% believe it is cost effective, and 55% think it is governed effectively. b) Interview comments indicate that school authorities feel their staff do not know the difference between SuperNet, the Internet and Wi-Fi, and so they blame SuperNet for any issues with access or speed. c) A small number of school authorities are supplementing SuperNet with connectivity from another provider such as a cable TV service.
Internet Bandwidth	a) Access to the Internet is now considered an essential service. b) 68% of interviewed school authorities identified bandwidth and managing traffic, particularly with growing numbers of school authority and personal devices, as increasingly challenging. c) The average cost is \$97.00 per MB/s with 48% of authorities subscribing to between 41 and 200 MB/s. d) School authorities believe 100MB/s per school is currently required.



Digital Learning Environments	
Digital Learning Environments	a) Although 82% of ET/IT survey respondents report that their school authority provides access to a digital learning environment, defined as integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond, there is a strong feeling that they are all re-inventing the same wheel. b) 48% of interviewed school authorities indicated that there is an opportunity for a single, provincial, cloud-based collaboration strategy, which could be leveraged by all school authorities. This would allow for the sharing of resources in a standard, searchable format, to support all teachers and students. c) A provincial solution would also need to address Freedom of Information and Protection of Privacy issues.
Collaboration Tools for Teachers and Students	a) The following are the top tools used for teacher/student collaboration, as identified by the school authorities who participated in the interviews (a number of school authorities identified more than one tool): 1) 81%: Google Apps for Education 2) 19%: Moodle 3) 10%: SharePoint 4) 7%: Twitter, email, videoconferencing 5) 5%: Desire2Learn, Telephone, Skype 6) 3%: Collaborate, school authority portal, Edmodo, school authority SIS 7) 2%: Elluminate, Drop Box, school server, Facebook, Blackboard, Filer, Etherpad, Thumb drives, Office 365, blogging, Prezi, Adobe Connect, GoTo Meeting, Hapara
Provincial Data Warehouse, SIS, IPP and Report Card Standards	a) Interviewed school authorities indicate they are all finding their own solutions to common needs and see opportunities to increase efficiency through economies of scale in the following areas: 1) 35% of interviewed school authorities indicated they would like to aggregate all their student data into one location, like a data warehouse to monitor and support student-centred learning. They feel a provincial solution could meet the needs of the majority of school authorities. 2) 15% of interviewed school authorities felt there should be a provincial student information system.



	3) 5% of interviewed school authorities felt there should be a provincial, web-based IPP standard. 4) 2% of interviewed school authorities indicated there should be a standard provincial report card.
Digital Resources and Textbooks	a) 24% of interviewed school authorities would like to move to digital textbooks and other software resources but would like the Ministry to take the lead in attaining provincial licensing.



Policy Direction 5 LTPF Gap Analysis

Policy Direction 5: Access, Infrastructure and Digital Learning Environments – Outcomes	
Outcome – Students, teachers, administrators and other education professionals have support for and equitable access to:	
LTPF Desired Outcome	Provincial Current State
a. devices and peripherals	There is a difference of opinion in the survey responses of teachers, school authority leaders and ET/IT leaders as to whether students have equitable access to devices. 68% of survey responding teachers and 82% of survey responding ET/IT leaders indicate they feel students have equitable access. Survey Results: Students have equitable access to devices (i.e. workstations, laptops, tablets, etc.) (Q 55a, 55b, 55c): Teachers ■ SA/A ■ D/SD ■ DK SA Leaders ■ SA/A ■ D/SD ■ DK ET Leaders ■ SA/A ■ D/SD ■ DK IT Leaders ■ SA/A ■ D/SD ■ DK

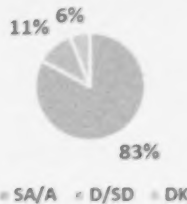
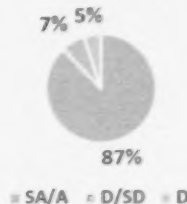
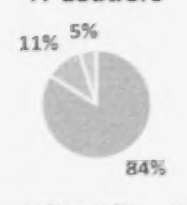


b. digital learning environments	There is a difference of opinion in the survey responses of teachers, school authority leaders and ET/IT leaders as to whether students have equitable access to digital learning environments. Survey Results: Students have equitable access to digital learning environments. DLEs are defined as integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond (Q 57a, 57b, 57c): Teachers 9% 31% 60% SA/A D/SD DK SA Leaders 6% 25% 69% SA/A D/SD DK ET Leaders 24% 0% 76% SA/A D/SD DK IT Leaders 5% 5% 90% SA/A D/SD DK
c. facilities designed to maximize learning with technology	School authorities report they are continually working to improve their facilities and provide the required access to technology for their staff and students. 84% of interviewed school authorities indicate funding is a major challenge in establishing the levels of access they view as required to fully implement the LTPF.



Outcome – In Alberta's education system:	
LTPF Desired Outcome	Provincial Current State
d. reliable infrastructures exist that support safe, secure, efficient, interoperable and sustainable networks	While survey responding school authority and ET/IT leaders are closer in their assessment of student equitable access to reliable networks, 32% fewer survey responding teachers agree with the ET/IT leader assessment. Survey Results: My students have equitable access to reliable networks (Q 62a, 62b, 62c): Teachers 63% 35% 2% SA/A D/SD DK SA Leaders 85% 13% 2% SA/A D/SD DK ET Leaders 94% 6% 0% SA/A D/SD DK IT Leaders 95% 2% 2% SA/A D/SD DK



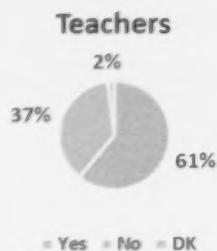
e. technology and network governance, policy and procedures ensure access essential to achieving the vision of <i>Inspiring Education</i>	Survey findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Survey Results: My school authority has adopted effective practices with respect to: (Q 116a, 116b, 116c): a) Information Technology Governance IT Leaders  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>83%</td> </tr> <tr> <td>D/SD</td> <td>11%</td> </tr> <tr> <td>DK</td> <td>6%</td> </tr> </tbody> </table> b) IT Services Management IT Leaders  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>87%</td> </tr> <tr> <td>D/SD</td> <td>7%</td> </tr> <tr> <td>DK</td> <td>5%</td> </tr> </tbody> </table> c) Information Security Management IT Leaders  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>84%</td> </tr> <tr> <td>D/SD</td> <td>11%</td> </tr> <tr> <td>DK</td> <td>5%</td> </tr> </tbody> </table>	Response	Percentage	SA/A	83%	D/SD	11%	DK	6%	Response	Percentage	SA/A	87%	D/SD	7%	DK	5%	Response	Percentage	SA/A	84%	D/SD	11%	DK	5%
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Response	Percentage																								
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f. appropriate technology is available and supported	Survey results indicate that teachers feel their students do not have sufficient access to technology in order to achieve student-centred learning. Survey responding teachers indicate there is more work to be done with respect to the level of technical support they need, while school authority and ET leaders estimate teachers do receive the required support.																								



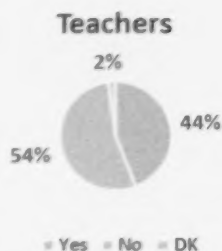
Survey Results:

Access to computers for your students is sufficient in terms of (Q 56a, 56b, 56c):

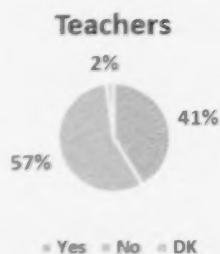
a) Accessibility (where they need them)



b) Quantity of computers



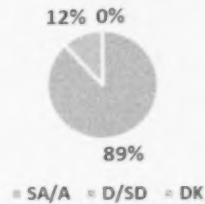
c) Availability of computers (when they need them)





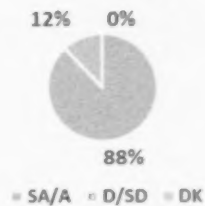
I feel I get the technical support that I require to meet the requirements of my job (Q 94a):

SA Leaders

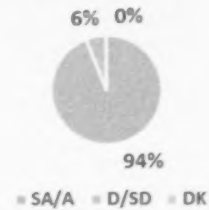


My school authority provides timely technical support (Q 94b):

ET Leaders

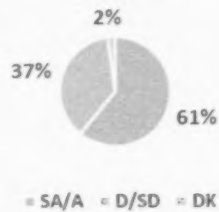


IT Leaders



Teachers receive the technical support that they require to meet their students' learning needs (Q 94c, 94d):

Teachers



ET Leaders



IT Leaders





	Students receive the technical support that they require to meet their learning needs (Q 94e): ET Leaders 18% 0% 82% ■ SA/A ■ D/SD ■ DK IT Leaders 8% 5% 87% ■ SA/A ■ D/SD ■ DK
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Action – School Authorities:	
LTPF Desired Action	Provincial Current State
a. ensure equitable student access to devices, other technologies and, as appropriate, to assistive technologies to support student learning	There is a difference of opinion between survey responding teachers, school authority leaders and ET/IT leaders as to whether students have equitable access to devices. There is a 20% spread in agreement between survey responding teachers and IT leaders with respect to equitable access to devices for students. Survey Results: Students have equitable access to devices (i.e. workstations, laptops, tablets, etc.) (Q 55a, 55b, 55c): Teachers 31% 1% 68% ■ SA/A ■ D/SD ■ DK SA Leaders 28% 1% 71% ■ SA/A ■ D/SD ■ DK

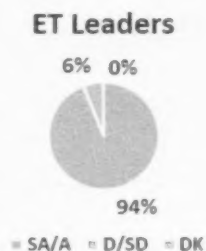
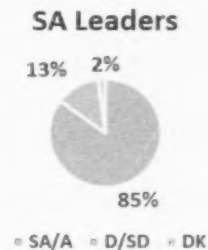
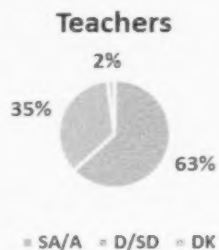


	ET Leaders 22% 2% 75% SA/A D/SD DK IT Leaders 9% 2% 88% SA/A D/SD DK My school authority provides access, when appropriate, to assistive technologies to support student learning (Q 60a, 60b): SA Leaders 7% 1% 92% SA/A D/SD DK ET Leaders 4% 2% 94% SA/A D/SD DK Students have equitable access to peripherals (i.e. printers, scanners, cameras, etc.) (Q 61a, 61b): SA Leaders 28% 2% 70% SA/A D/SD DK ET Leaders 26% 4% 69% SA/A D/SD DK IT Leaders 5% 5% 90% SA/A D/SD DK
b. provide students, teachers, administrators and other education professionals with access to well-designed, high-speed, reliable and sustainable networks and technology infrastructures	There is a difference of opinion between survey responding teachers, school authority leaders and ET/IT leaders as to whether students have equitable access to reliable networks. There is a 32% spread in agreement between survey responding teachers and IT leaders with respect to equitable access to reliable networks for students.

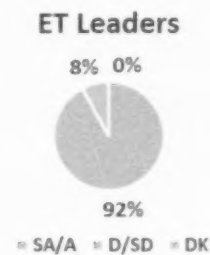
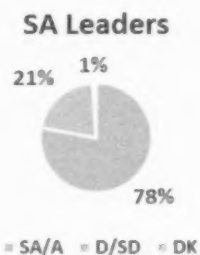


Survey Results:

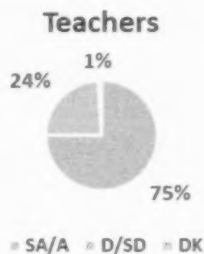
My students have equitable access to reliable networks (Q 62a, 62b, 62c):



My school authority provides users with access to well-designed, high-speed, reliable and sustainable networks and technology infrastructures (Q 75a, 75b):



In my school, I have access to reliable networks (Q74a):





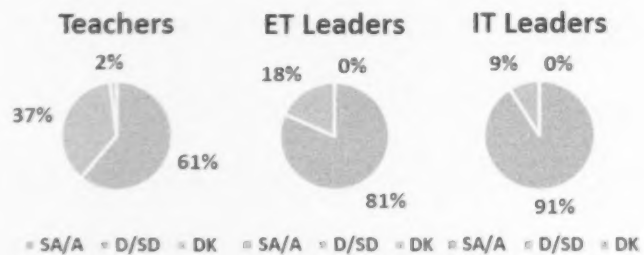
c. consider opportunities for community partnerships that expand access to technology-supported learning experiences	Survey results indicate there is a greater involvement in partnerships at the IT leader level than there is as the ET or school authority leader levels. Survey Results: My school authority seeks out partnership opportunities to support innovative use of technology with communities (Q 42a, 42b): SA Leaders ET Leaders IT Leaders ■ SA/A ■ D/SD ■ DK ■ SA/A ■ D/SD ■ DK ■ SA/A ■ D/SD ■ DK
d. ensure the administration of safe and secure networks, infrastructure and technologies	Survey findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. 92% of survey responding ET leaders report their school authority ensures the administration of secure networks. Survey Results: My school authority ensures the administration of secure networks(Q 76): ET Leaders ■ SA/A ■ D/SD ■ DK

e. provide students, teachers, administrators and other education professionals with access to high-quality digital learning environments	Survey findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. 86% of survey responding ET leaders report their school authority provides users with access to high-quality digital learning environments. Survey Results: My school authority provides users with access to high-quality digital learning environments (Q 77): ET Leaders  14% 0% 86% ■ SA/A ■ D/SD ■ DK
f. provide and maintain timely technical support and services	Survey responding teachers indicate that there is more work to be done with respect to receiving the level of technical support they need, while survey responding school authority and ET leaders report they do receive their required support. Survey Results: I feel I get the technical support that I require to meet the requirements of my job (Q 94a): SA Leaders  12% 0% 89% ■ SA/A ■ D/SD ■ DK

My school authority provides timely technical support (Q 94b):



Teachers receive the technical support that they require to meet their students' learning needs (Q 94c, 94d):



Students receive the technical support that they require to meet their learning needs (Q 94e)





g. adopt and maintain effective practices and up-to-date technological standards with respect to Information Technology (IT) governance, IT management, and information security management.

Survey findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome.

Survey Results:

My school authority has adopted effective practices with respect to: (Q 116a, 116b, 116c):

a) Information Technology Governance



b) IT Services Management



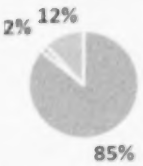
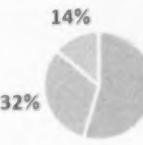
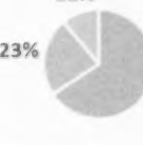
c) Information Security Management





Action – The Ministry of Education:																									
LTPF Desired Action	Provincial Current State																								
a. supports access to a safe and secure, high-speed network for school authorities	Survey findings indicate that the majority of school authorities feel they are well aligned with achieving this outcome. Survey Results: In Alberta's education system, the SuperNet is (Q95a, 95b, 95c, 95d): a) reliable IT Leaders <table border="1"> <caption>IT Leaders - Reliable</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>88%</td> </tr> <tr> <td>D/SD</td> <td>8%</td> </tr> <tr> <td>DK</td> <td>4%</td> </tr> </tbody> </table> b) secure IT Leaders <table border="1"> <caption>IT Leaders - Secure</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>92%</td> </tr> <tr> <td>D/SD</td> <td>7%</td> </tr> <tr> <td>DK</td> <td>1%</td> </tr> </tbody> </table> c) valuable to my school authority IT Leaders <table border="1"> <caption>IT Leaders - Valuable to my school authority</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>SA/A</td> <td>94%</td> </tr> <tr> <td>D/SD</td> <td>4%</td> </tr> <tr> <td>DK</td> <td>2%</td> </tr> </tbody> </table>	Response	Percentage	SA/A	88%	D/SD	8%	DK	4%	Response	Percentage	SA/A	92%	D/SD	7%	DK	1%	Response	Percentage	SA/A	94%	D/SD	4%	DK	2%
Response	Percentage																								
SA/A	88%																								
D/SD	8%																								
DK	4%																								
Response	Percentage																								
SA/A	92%																								
D/SD	7%																								
DK	1%																								
Response	Percentage																								
SA/A	94%																								
D/SD	4%																								
DK	2%																								



	d) interoperable IT Leaders  ■ SA/A ■ D/SD ■ DK
b. seeks out and implements strategies that result in more affordable and sustainable access to technology and networking	Survey responding IT leaders indicate that there is more work to be done with respect to the governance and cost effectiveness of Alberta's SuperNet. Survey Results: In Alberta's education system, the SuperNet is (Q 95e, 95f): a) governed effectively IT Leaders  ■ SA/A ■ D/SD ■ DK b) cost effective IT Leaders  ■ SA/A ■ D/SD ■ DK



c. considers community and private-sector partnerships to support access and system efficiencies	This area was not specifically reviewed.
d. develops and periodically updates technology/networking standards	This area was not specifically reviewed.
e. tracks and reports emergent technology trends	This area was not specifically reviewed.



Appendix A: Online Survey Results

Policy Direction 1 Online Survey Results

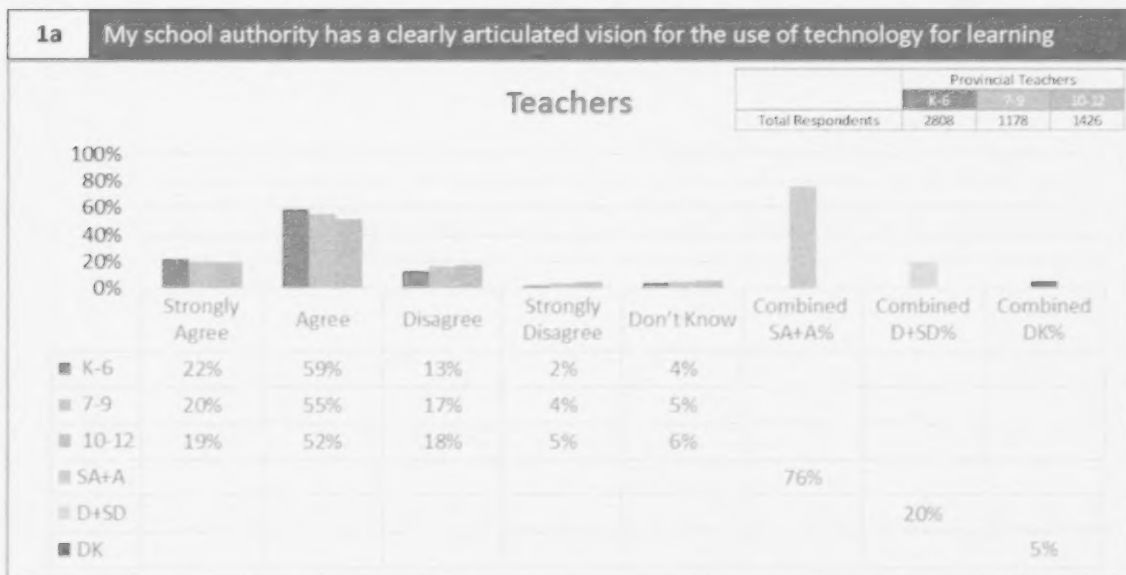
Definitions and Notes for Tables and Bar Graphs

- SA+A = Strongly Agree and Agree
- D+SD = Disagree and Strongly Disagree
- DK = Don't Know
- ET = Educational Technology Leaders
- IT = Information Technology Leaders
- Percentage response numbers have been rounded to the nearest whole number. Therefore the total of all responses from a single group may not always equal 100%.

A. Technology Vision

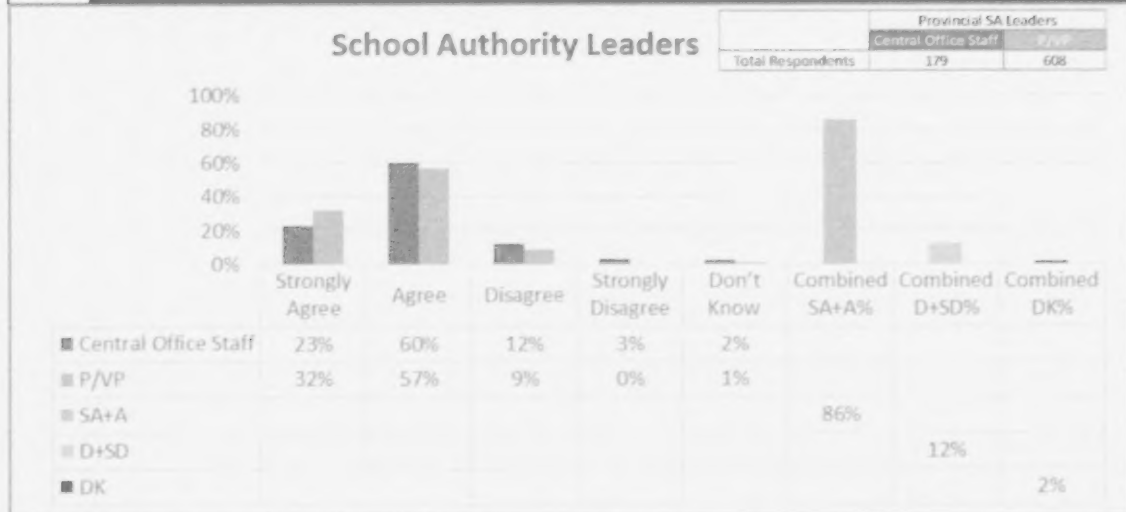
The "Combined" sections of the following charts read as follows:

- **Combined SA+A%:** 77% of surveyed teachers from all grades Strongly Agree or Agree (SA+A%) that their school has a clearly articulated vision for the use of technology for learning
- **Combined D+SD%:** 20% of surveyed teachers from all grades Disagree or Strongly Disagree (D+SD%) that their school has a clearly articulated vision for the use of technology for learning
- **Combined DK%:** 5% of surveyed teachers from all grades responded with Don't Know (DK%) when asked if they felt that their school has a clearly articulated vision for the use of technology for learning

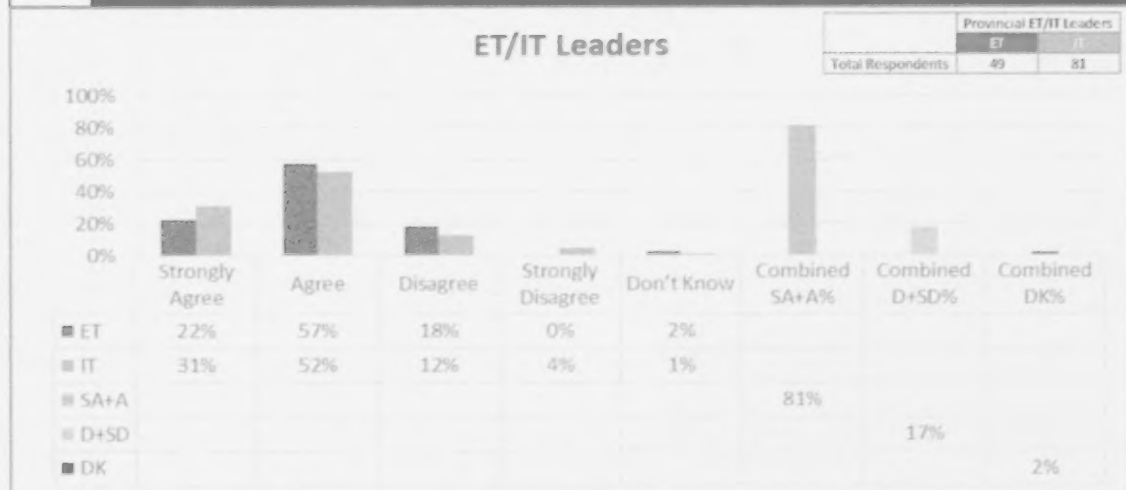




1b My school authority has a clearly articulated vision for the use of technology for learning

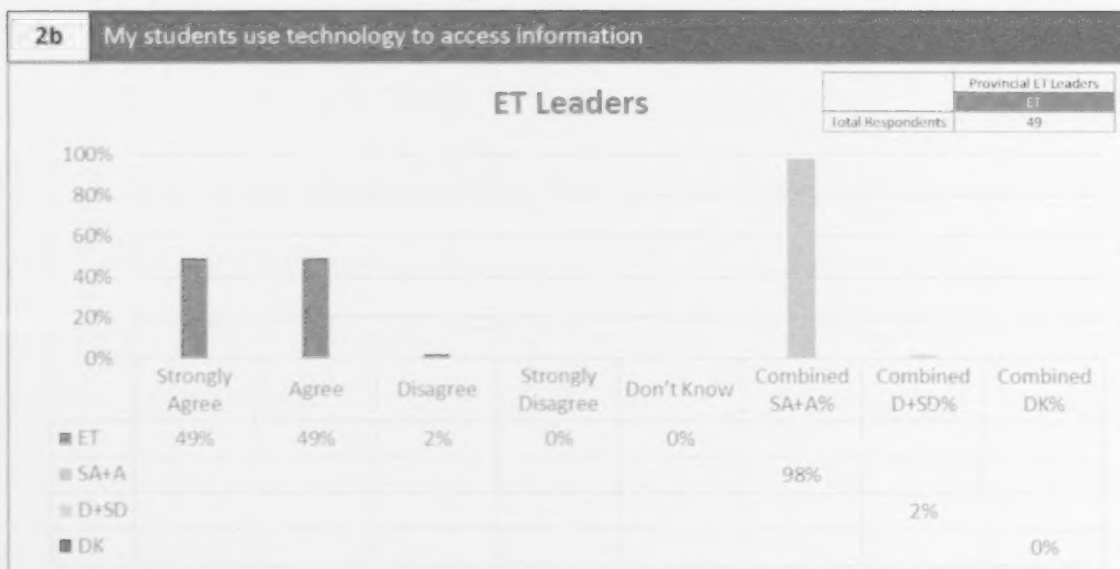
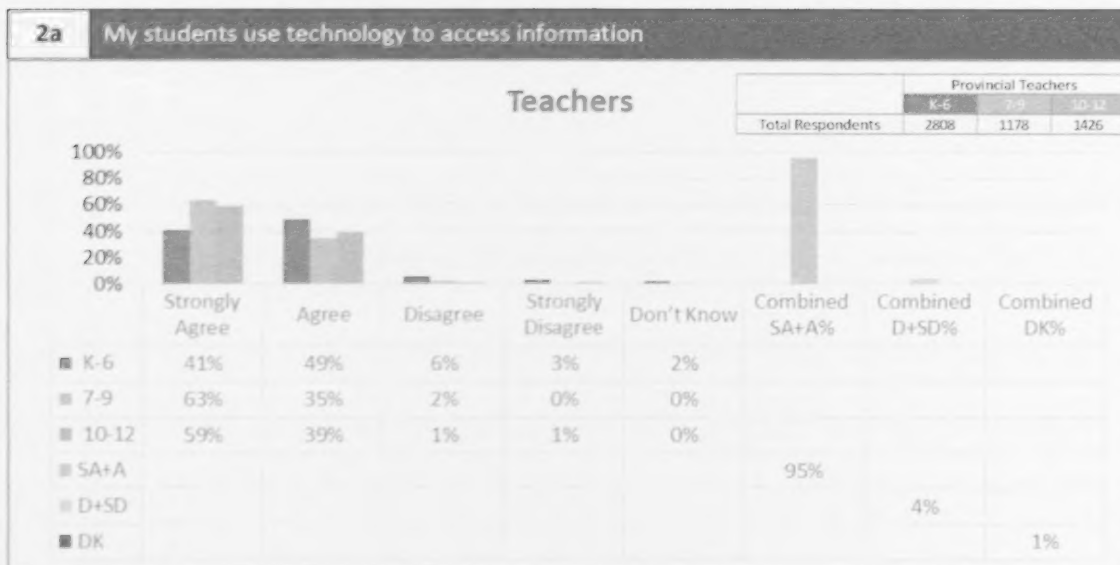


1c My school authority has a clearly articulated vision for the use of technology for learning



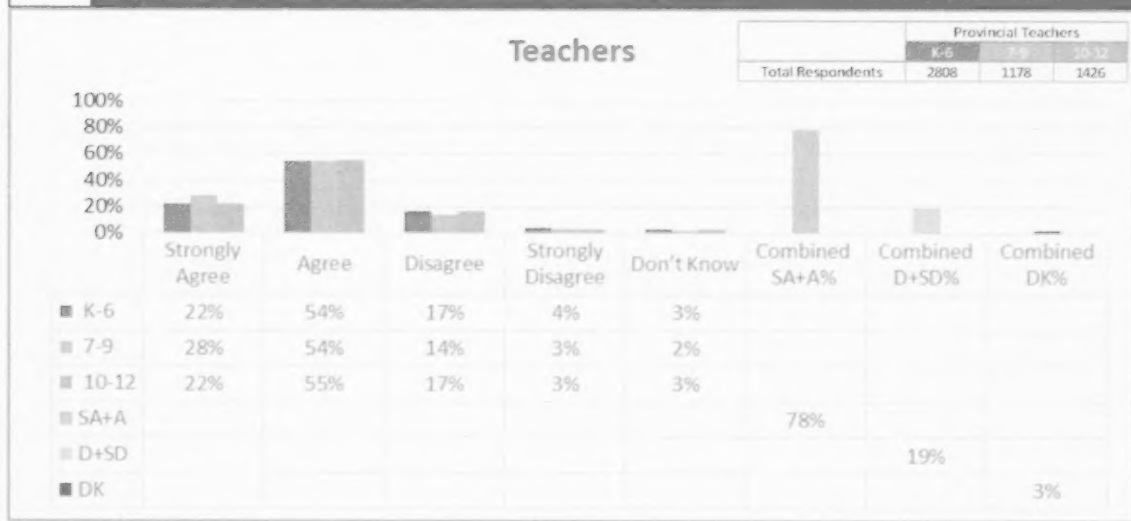


B. Student Use of Technology

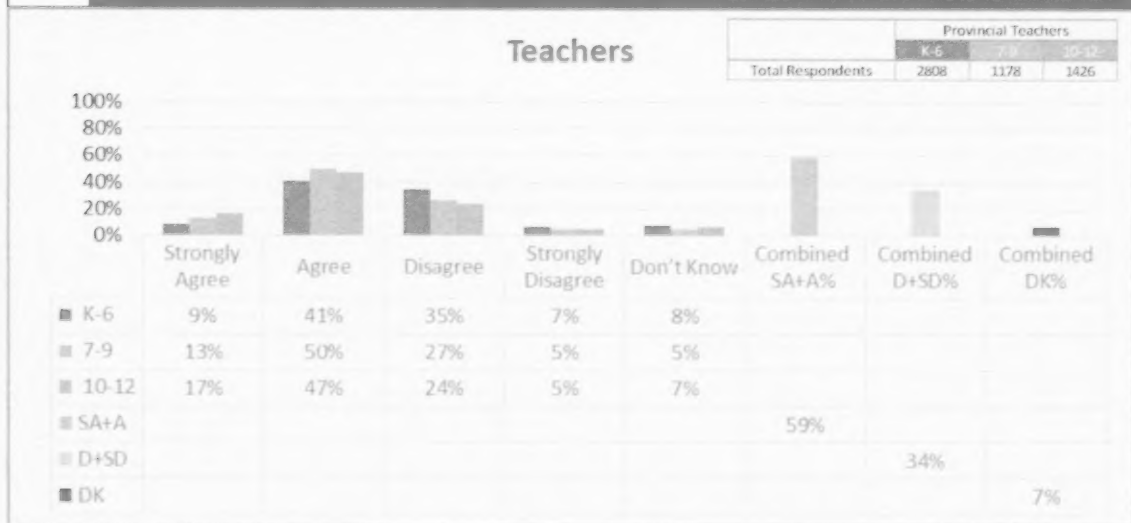




3 My students use technology to work collaboratively



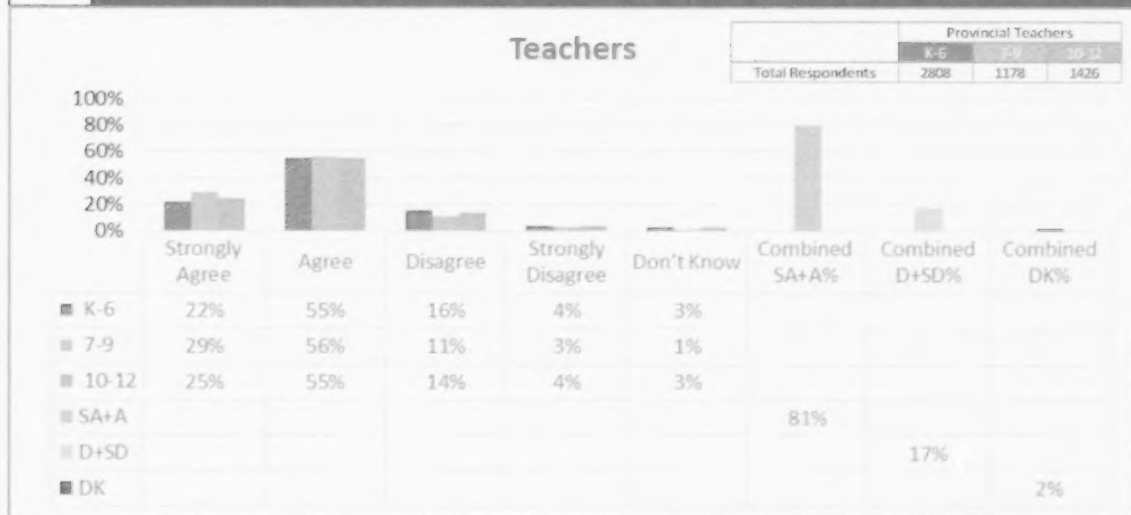
4 My students use technology to solve complex problems





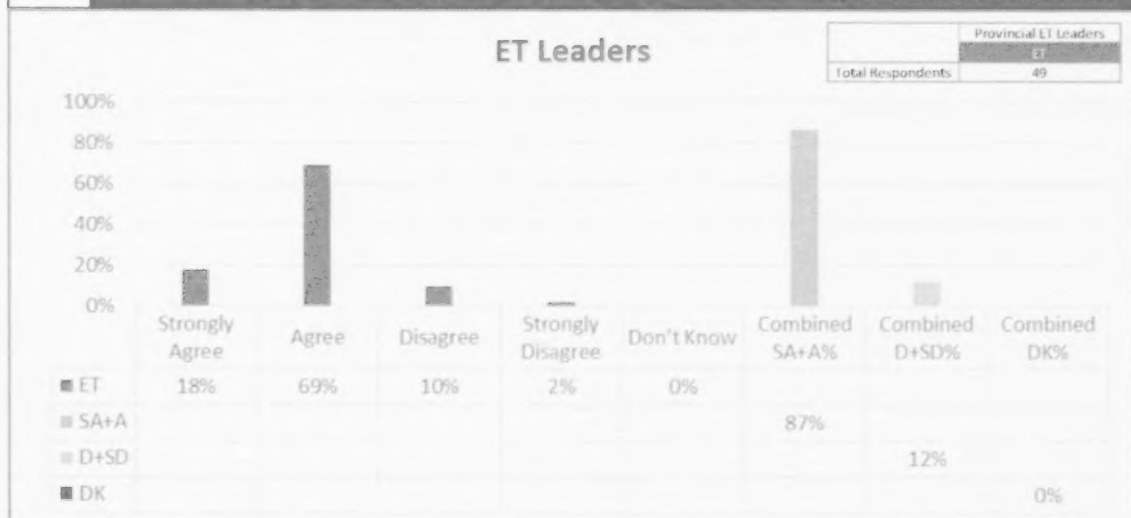
5

My students use technology to demonstrate what they know and are able to do through effectively using a range of resources and media



6

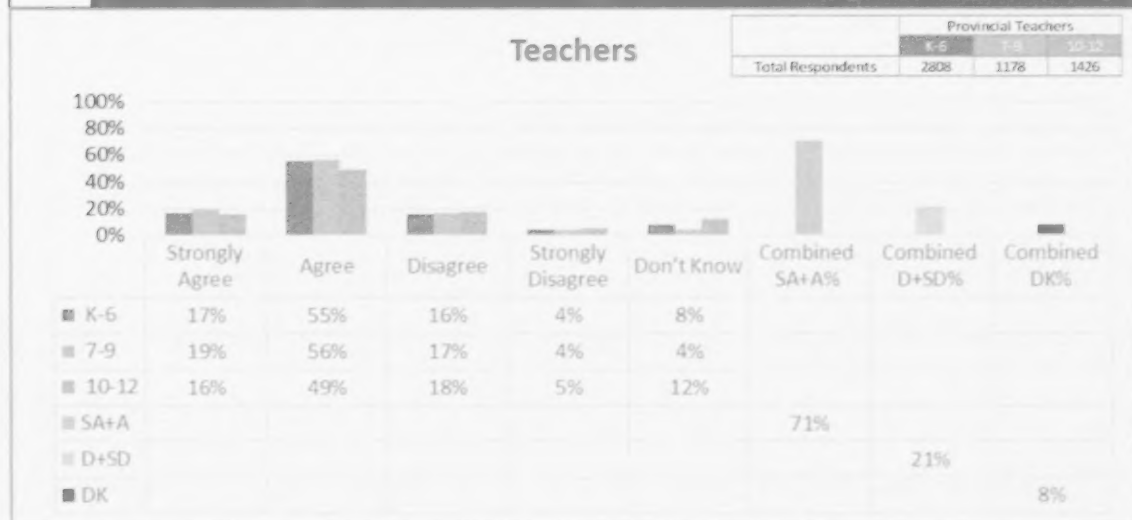
Students in my school authority use technology to share knowledge



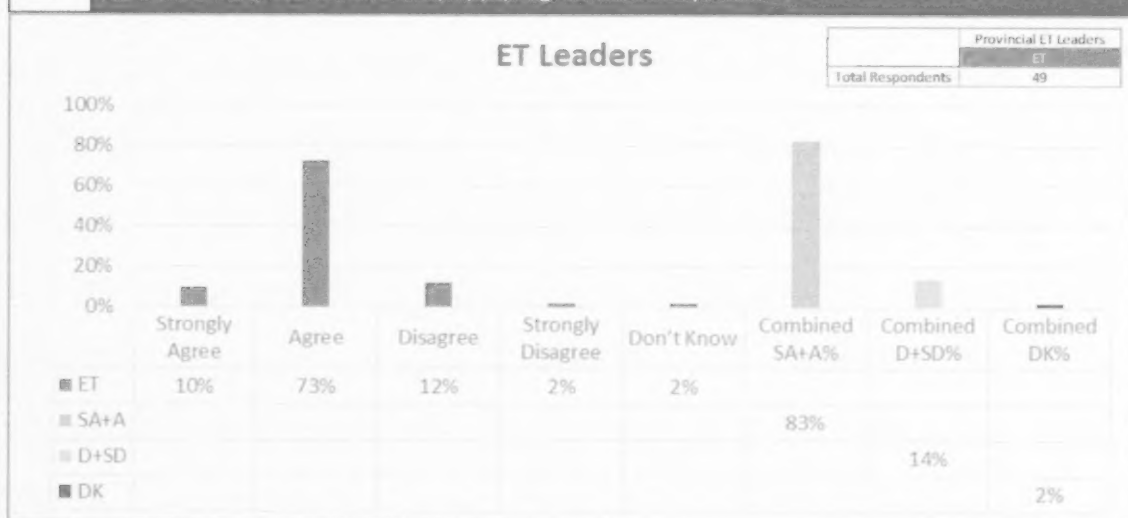
7 Students in my school authority use technology to create knowledge



8 My students use technology to apply digital citizenship skills

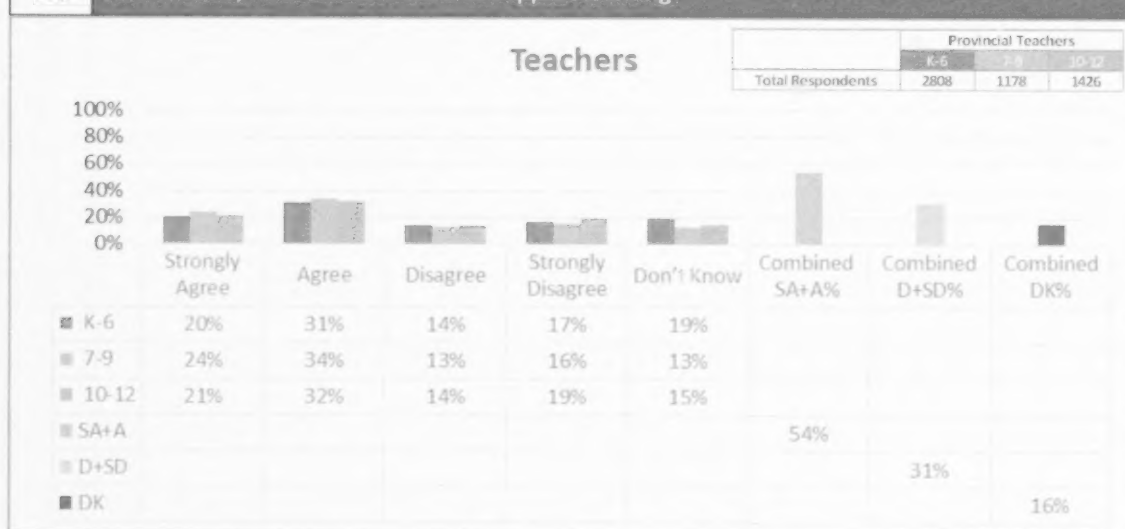


9 Students in my school authority apply digital citizenship skills



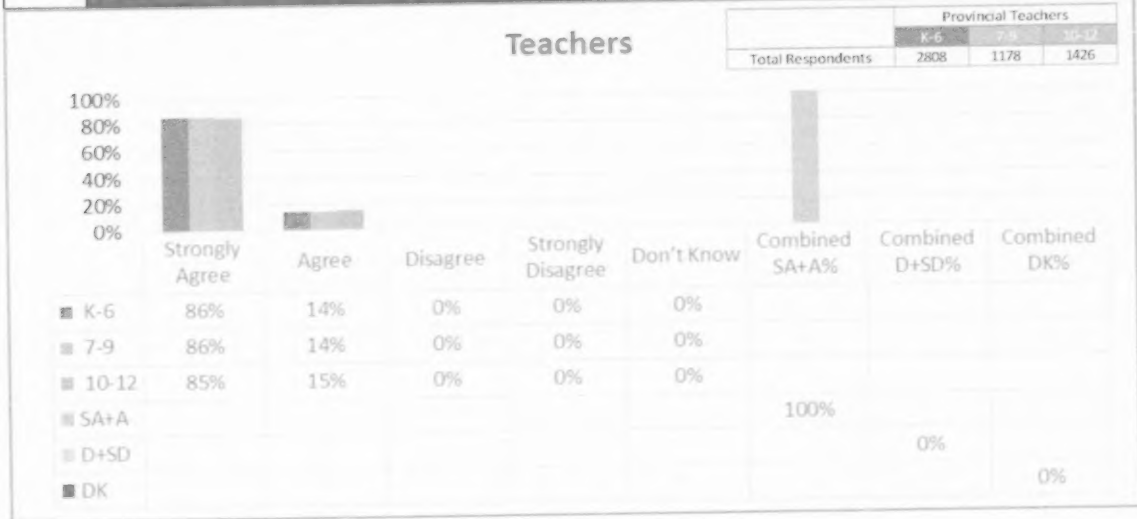
C. Teacher Use of Technology

10a As a teacher, I use Web 2.0 tools to support learning

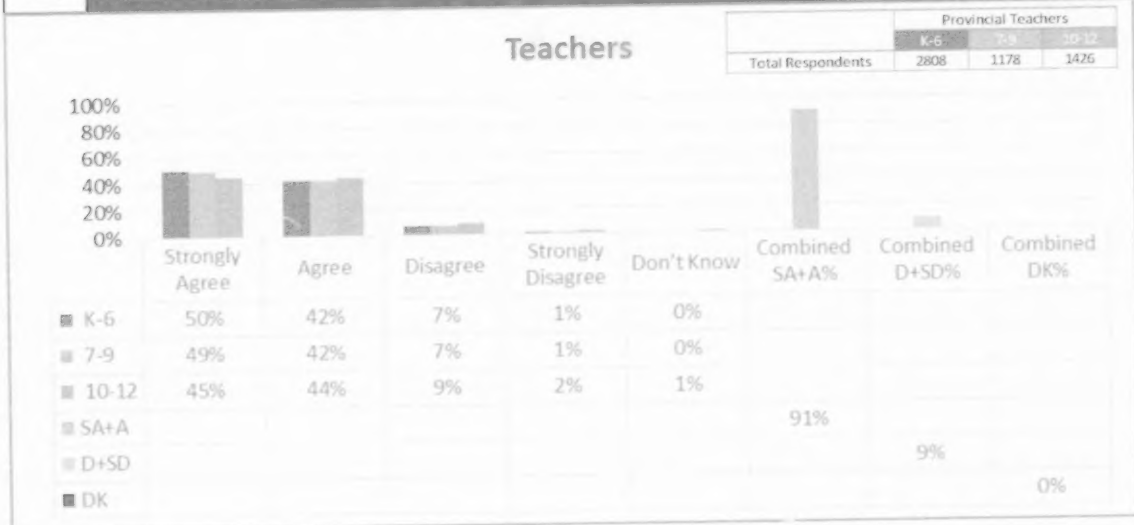




10b As a teacher, I use technology to access information

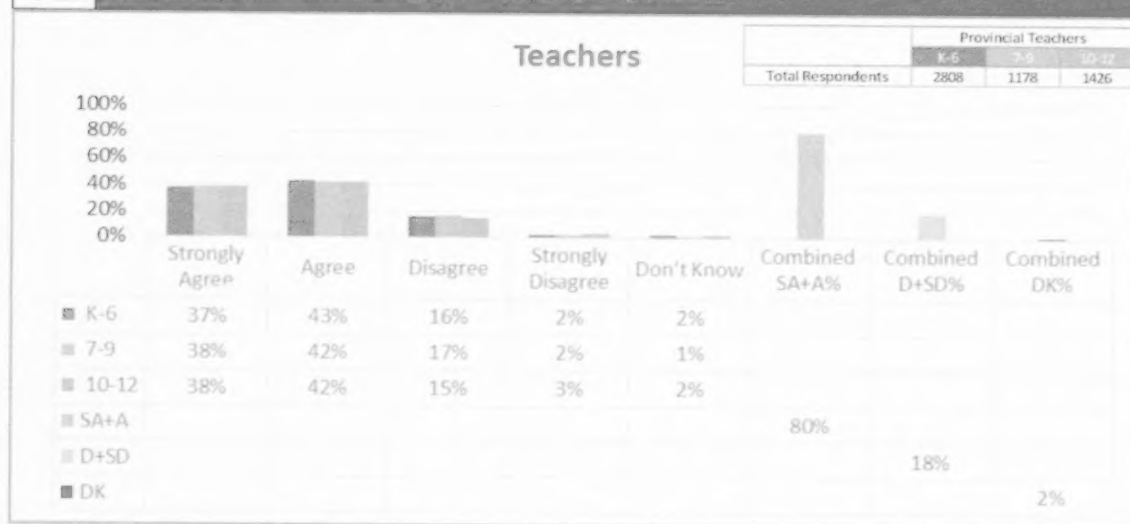


10c As a teacher, I use technology to work collaboratively

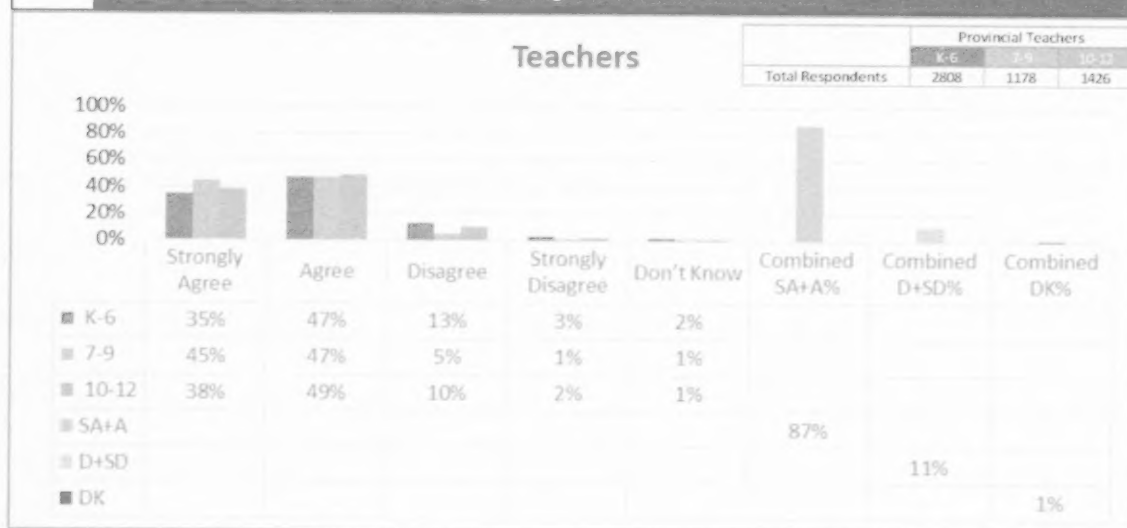




10d As a teacher, I use technology to solve complex problems

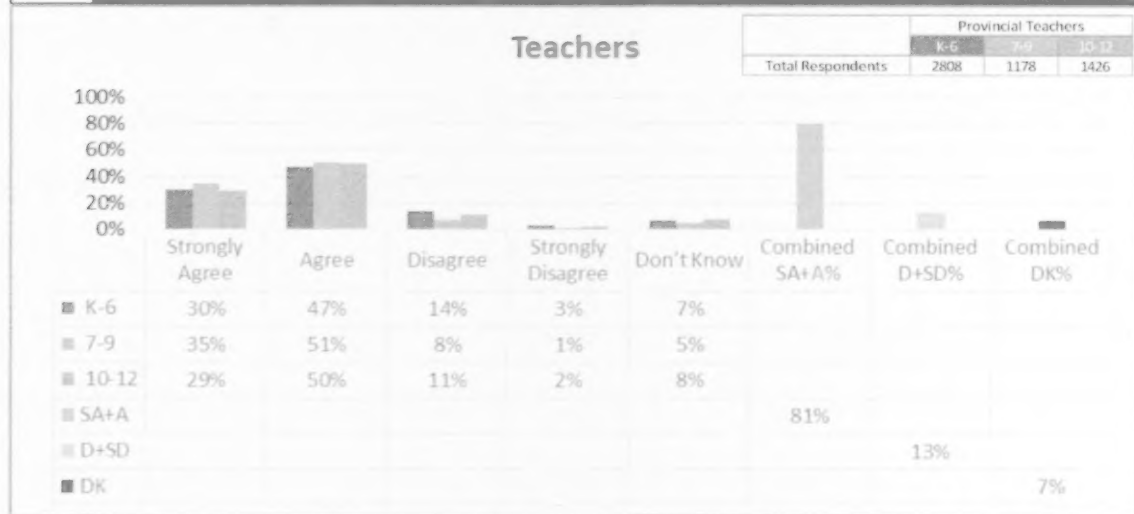


10e As a teacher, I use technology to allow my students to demonstrate what they know and are able to do through effectively using a range of resources and media





10f As a teacher, I use technology to allow my students to apply digital citizenship skills

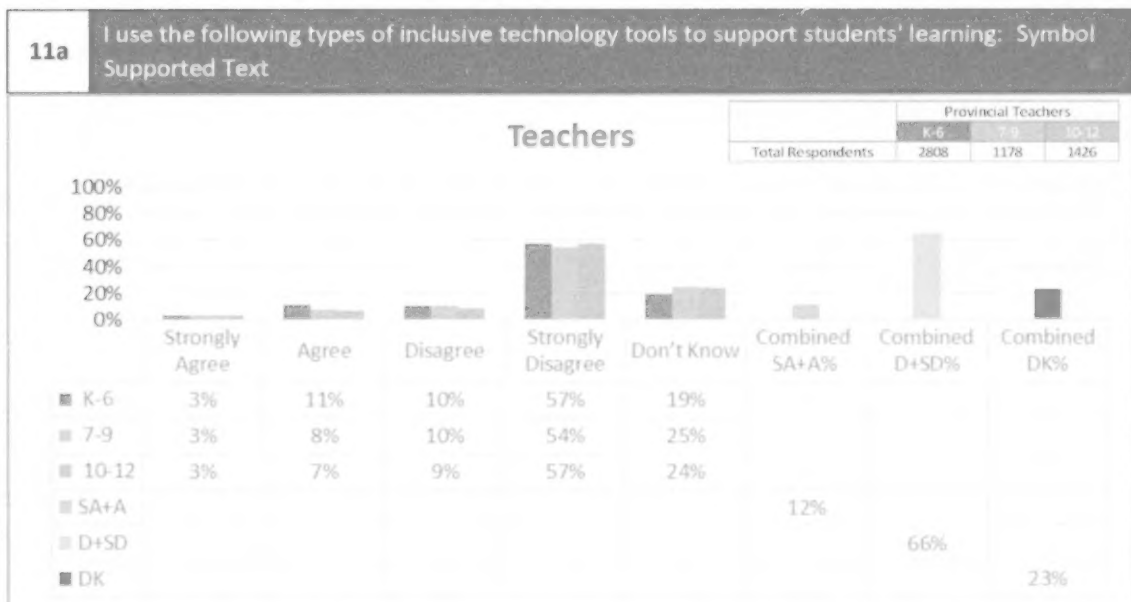




D. Inclusive Technology Tools

The combined average responses for all "Inclusive Technology Tools" in tables 11a to 11e are:

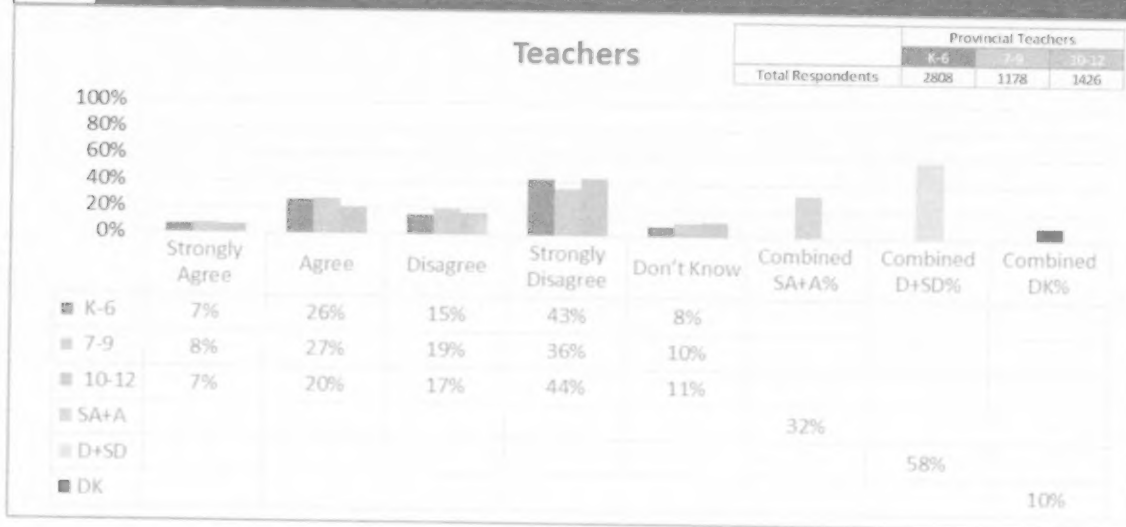
- **Combined SA+A%:** 21% of surveyed teachers from all grades Strongly Agree or Agree (SA+A%) that they use inclusive tools to support students' learning
- **Combined D+SD%:** 63% of surveyed teachers from all grades Disagree or Strongly Disagree (D+SD%) that they use inclusive tools to support students' learning
- **Combined DK%:** 16% of surveyed teachers from all grades responded with Don't Know (DK%) when asked if they use inclusive tools to support students' learning





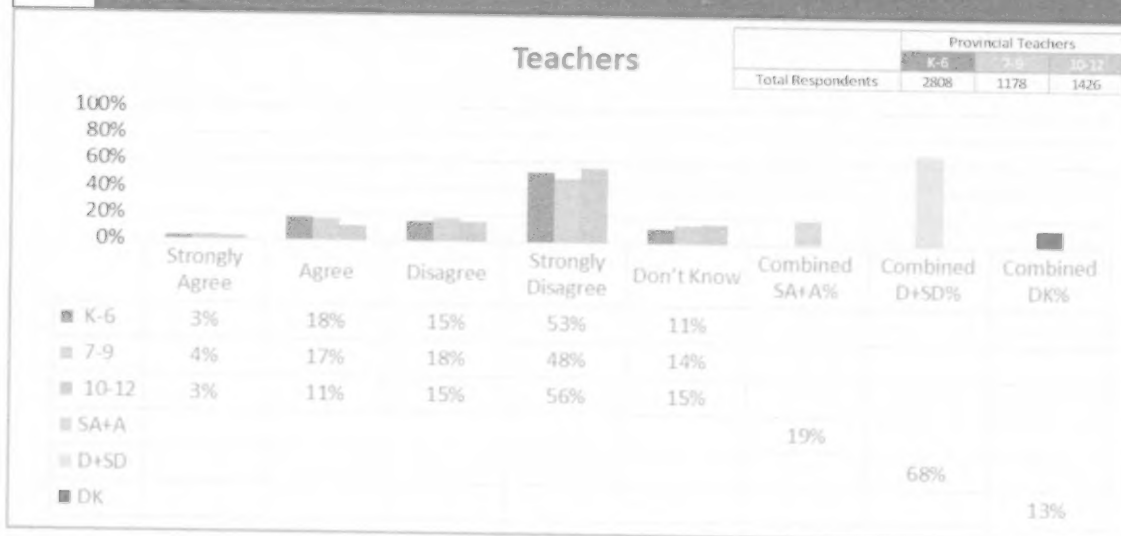
11b

I use the following types of inclusive technology tools to support students' learning: Text to Speech



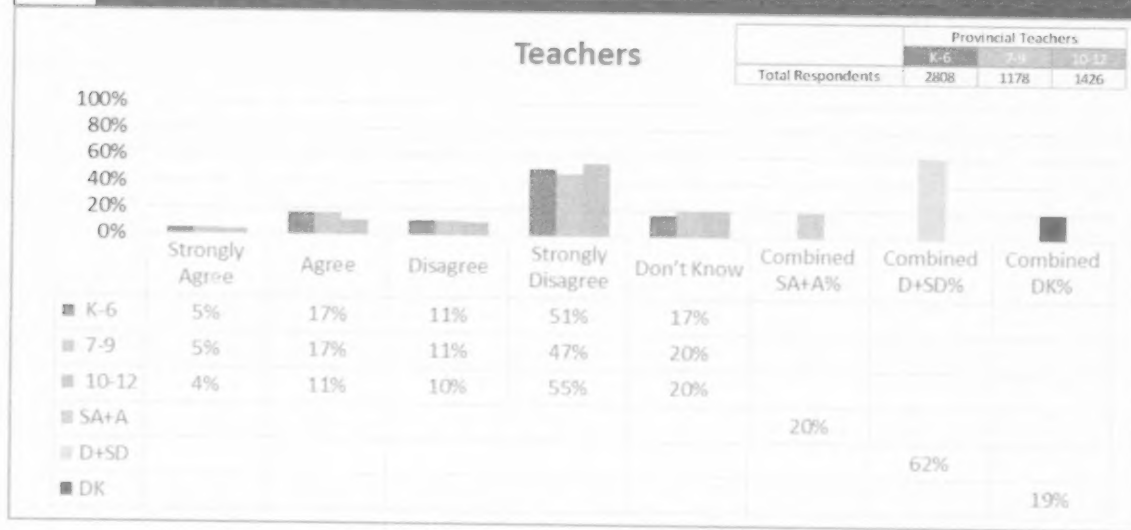
11c

I use the following types of inclusive technology tools to support students' learning: Speech Recognition



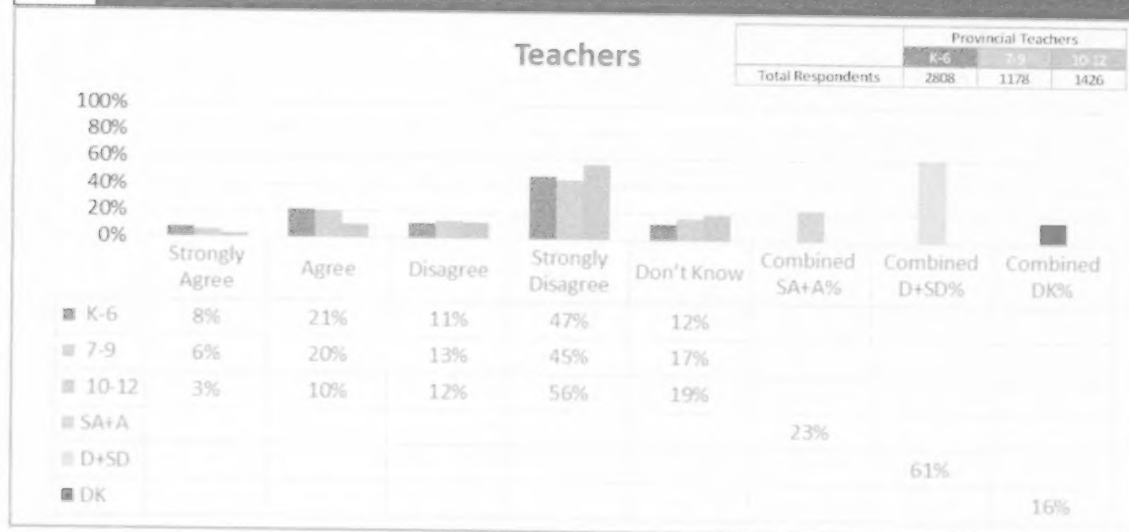
11d

I use the following types of inclusive technology tools to support students' learning: Visual Thinking



11e

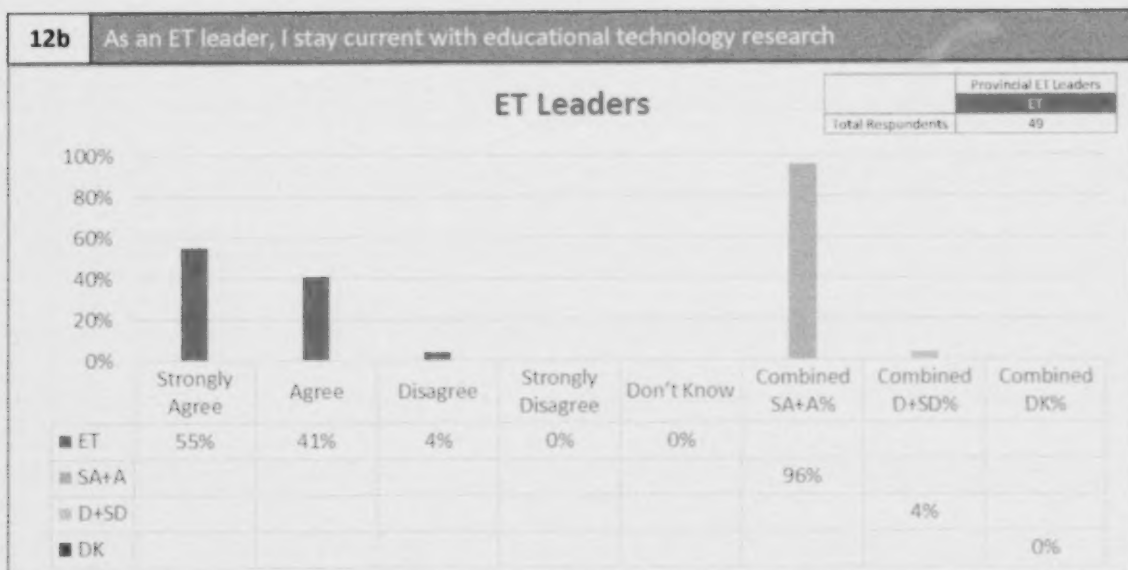
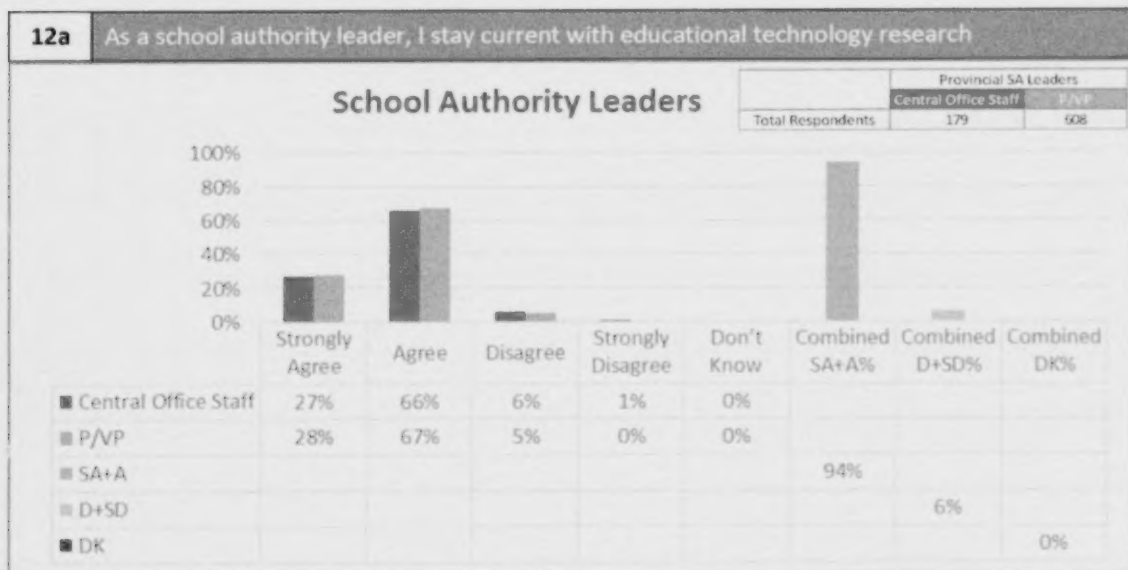
I use the following types of inclusive technology tools to support students' learning: Word Prediction





Policy Direction 2 Online Survey Results

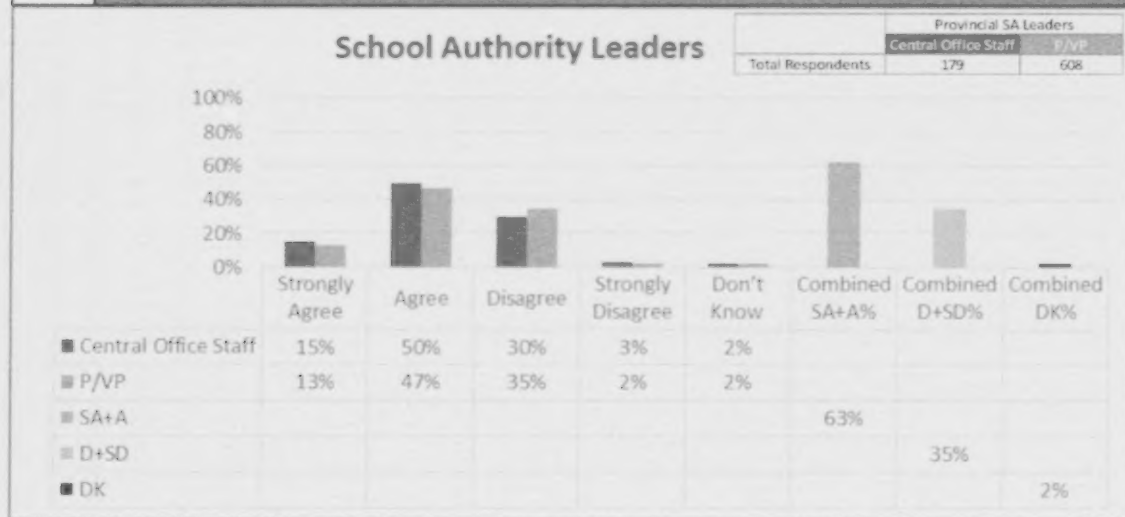
A. Staying Current with Research



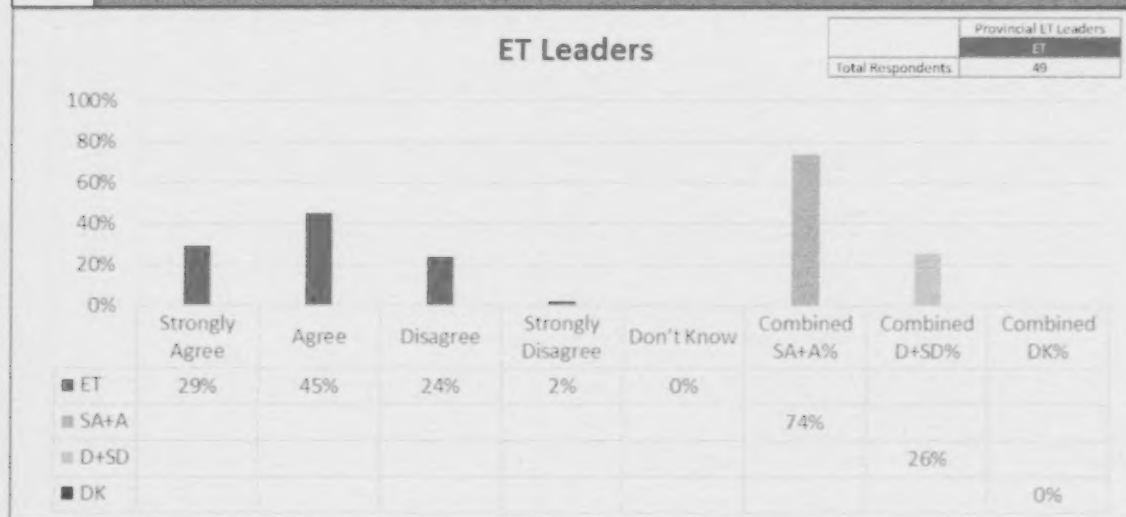


B. Participate in Research

13a As a school authority Leader, I participate in research



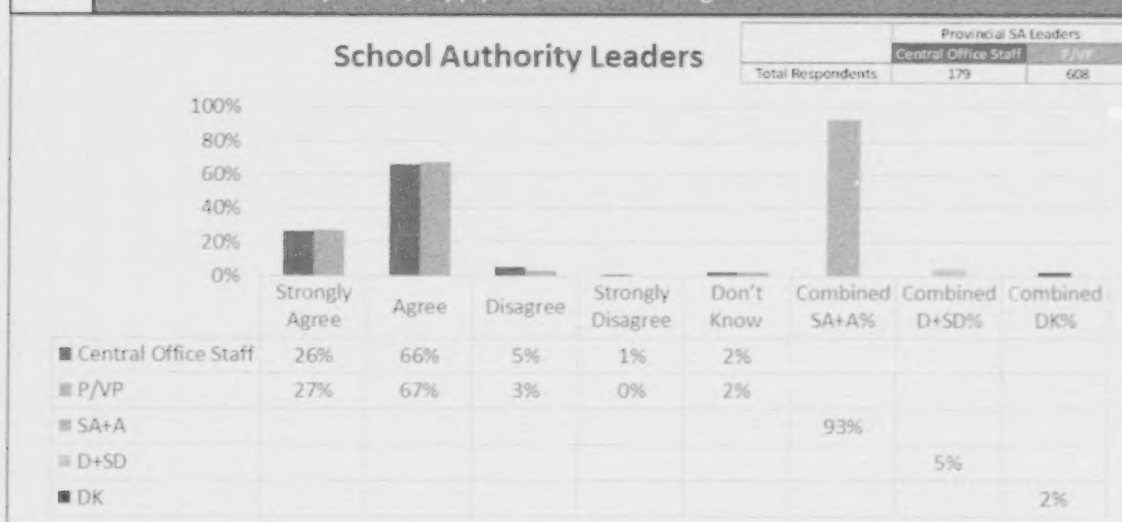
13b As an ET Leader, I participate in research



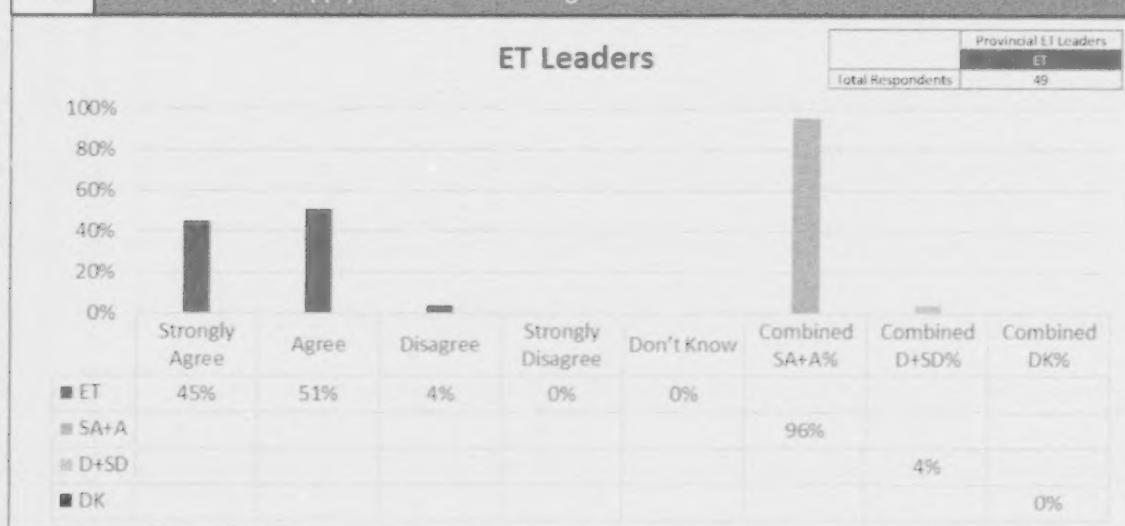


C. Apply Research to Learning

14a As a school authority leader, I apply research to learning



14b As an ET leader, I apply research to learning

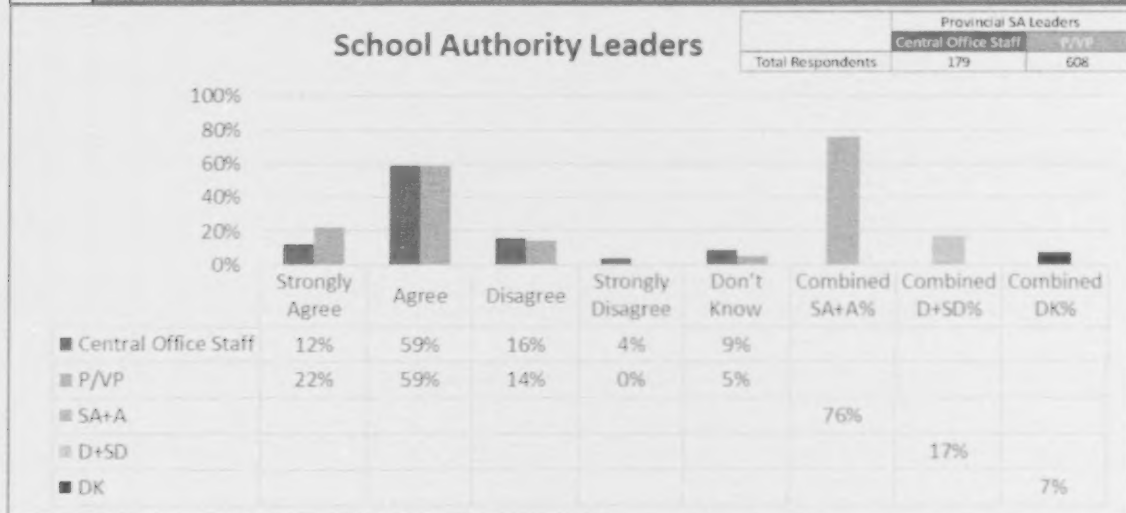




D. Use Data Systems

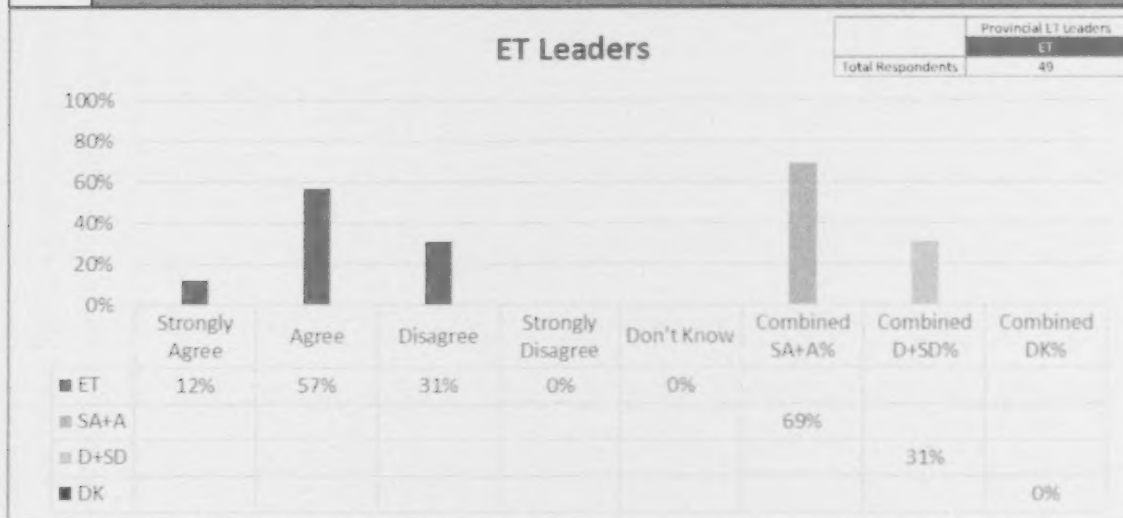
15a

As a school authority leader, I use data systems or evidence-based reasoning to monitor personalized student-centred learning



15b

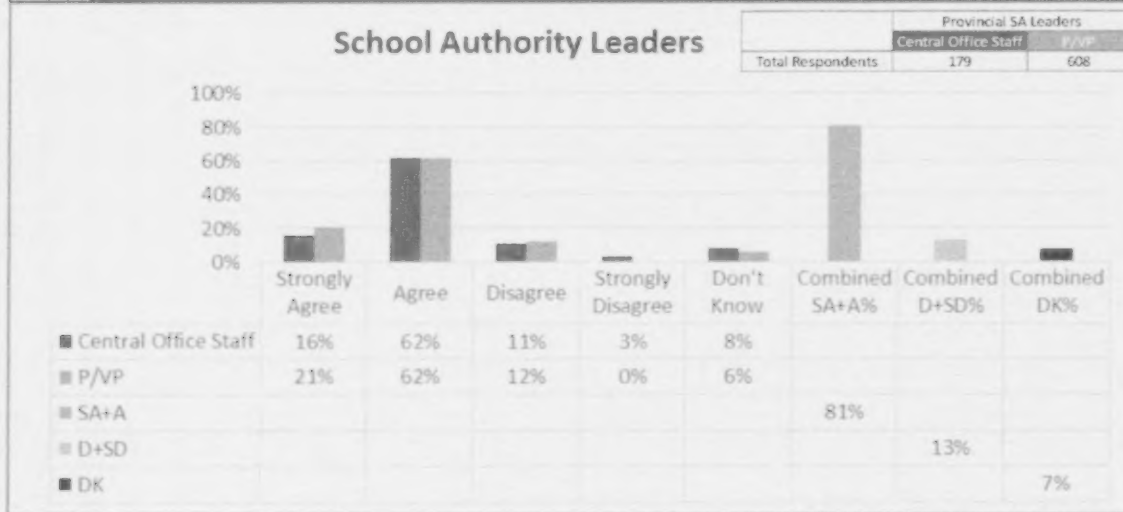
As an ET leader, I use data systems or evidence-based reasoning to monitor personalized student-centred learning





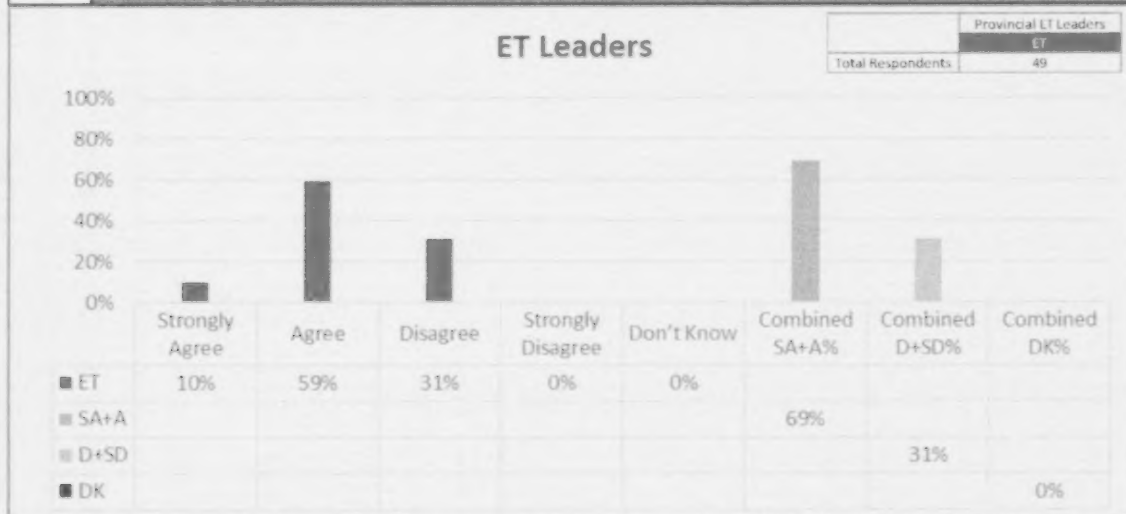
15c

As a school authority leader, I use data systems or evidence-based reasoning to support personalized student-centred learning



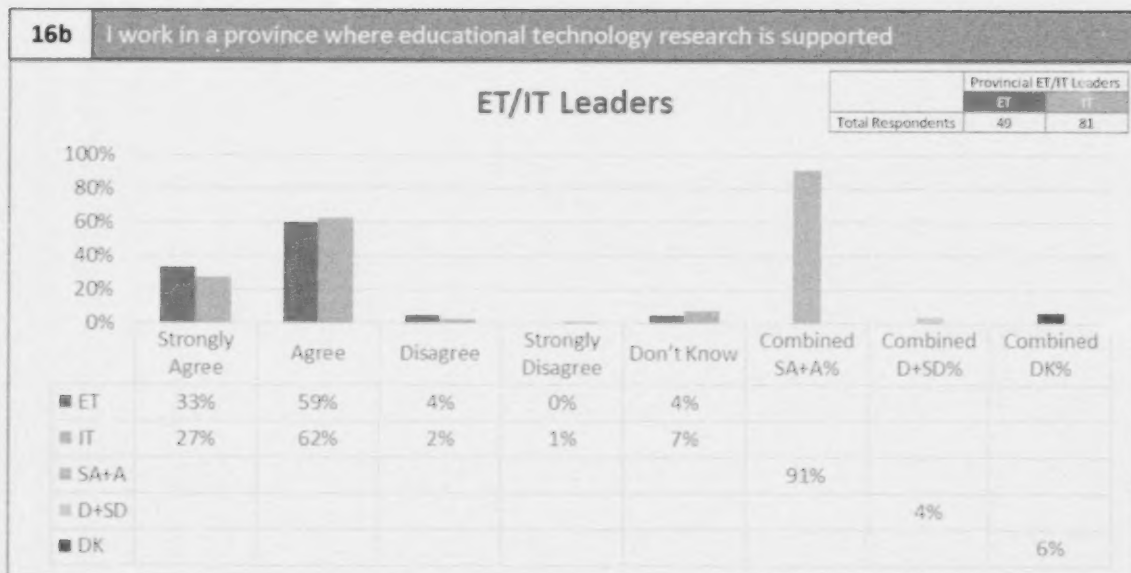
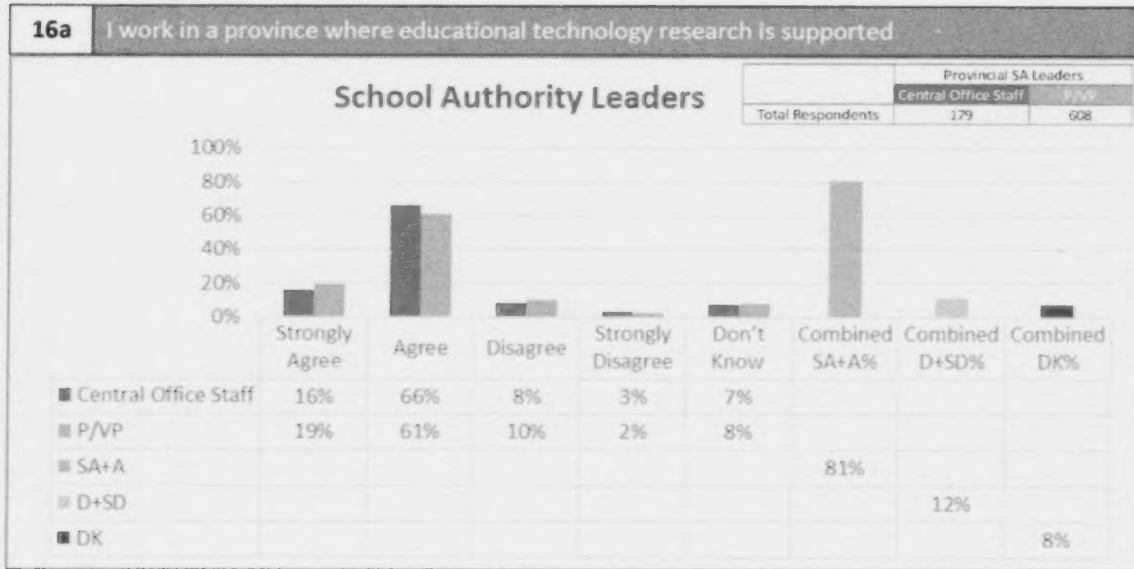
15d

As an ET leader, I use data systems or evidence-based reasoning to support personalized student-centred learning





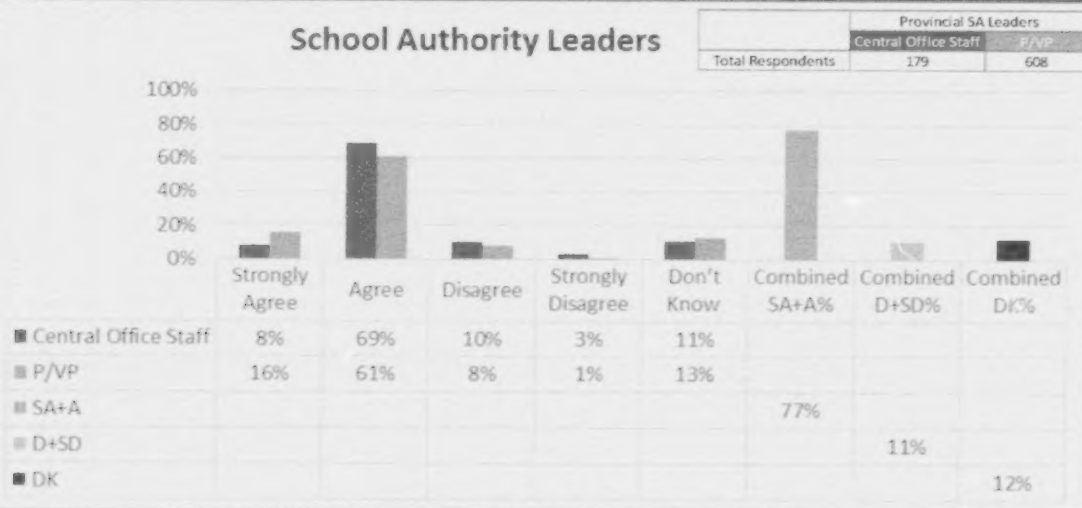
E. Provincial support for research



16c

I work in a Province where decision making related to educational technology is informed by data/research

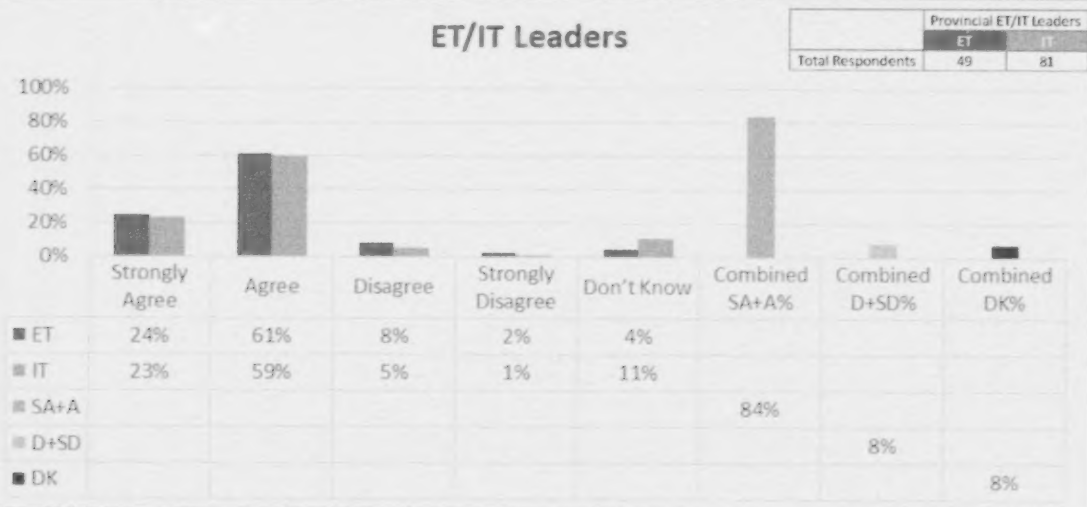
School Authority Leaders



16d

I work in a Province where decision making related to educational technology is informed by data/research

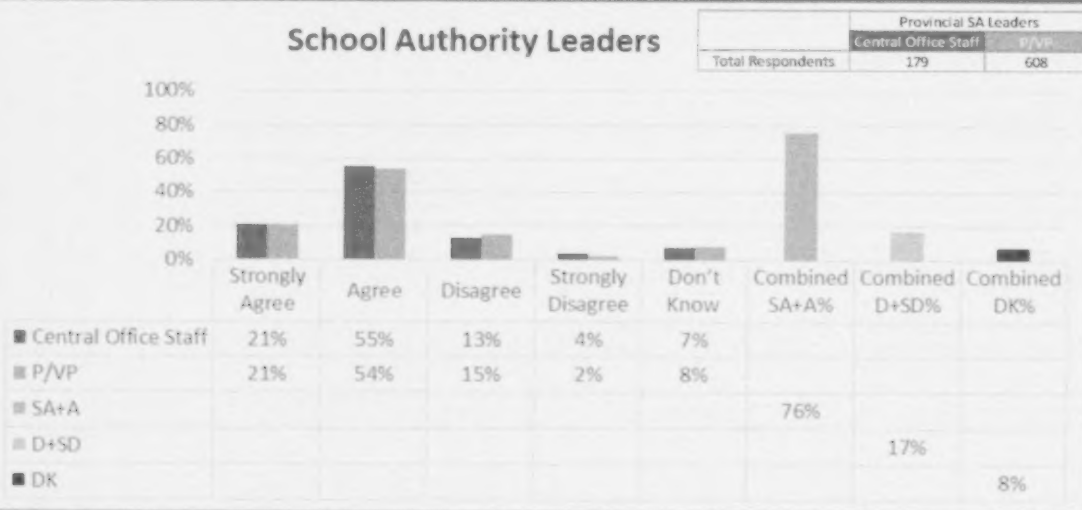
ET/IT Leaders



16e

I work in a province where educational technology investments are targeted to areas of greatest need

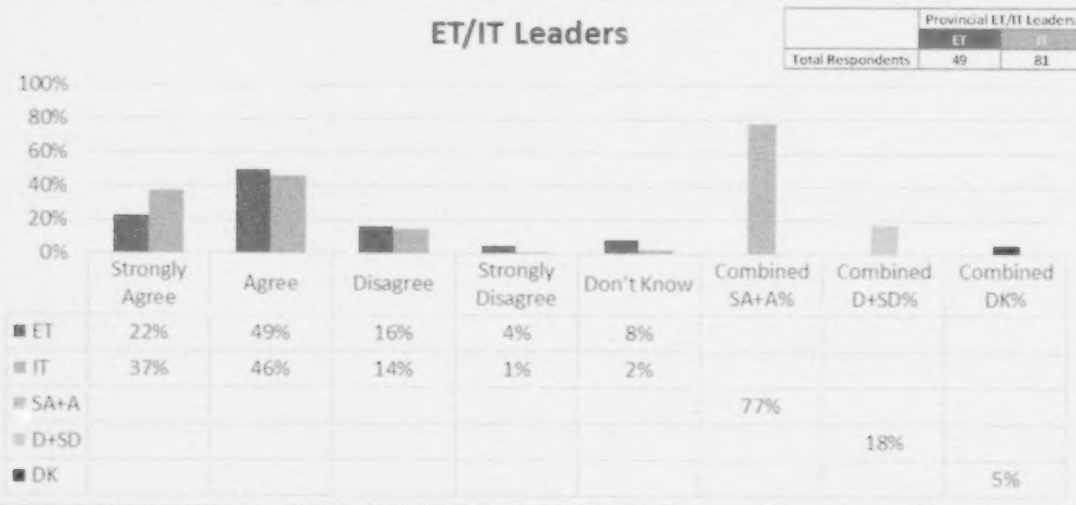
School Authority Leaders



16f

I work in a province where educational technology investments are targeted to areas of greatest need

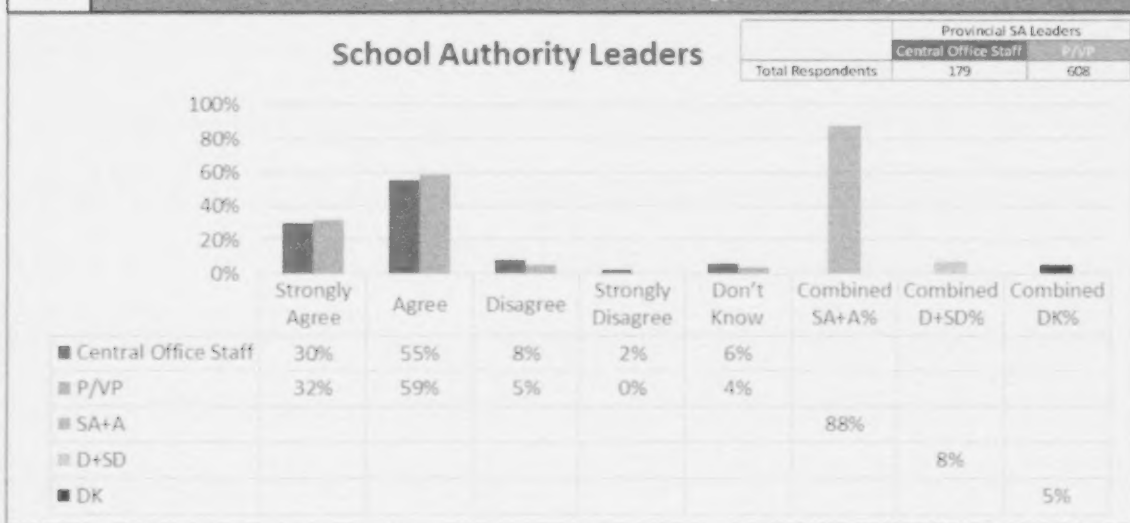
ET/IT Leaders



F. School authority support for research

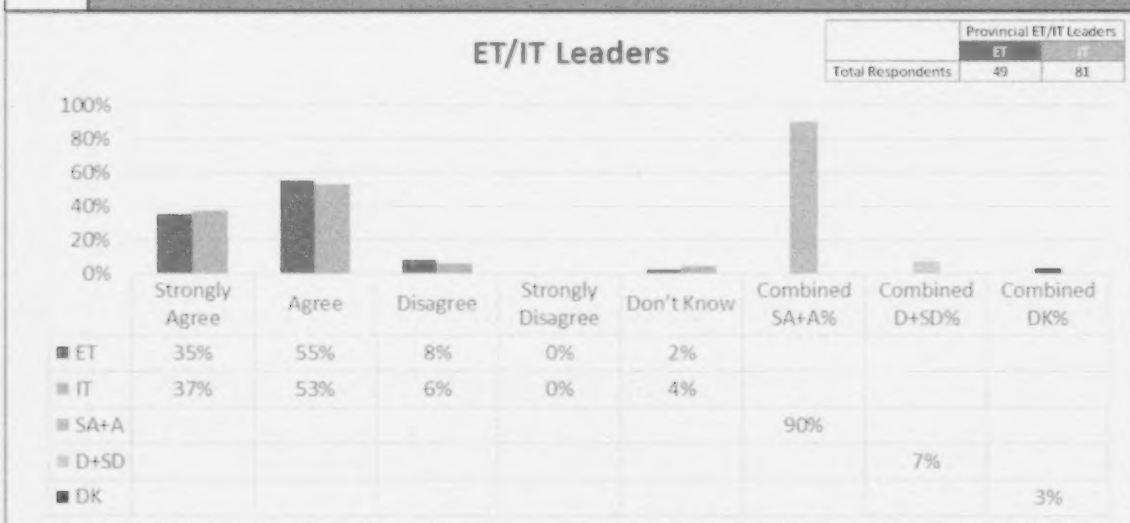
17a

I work in a school authority where educational technology research is supported



17b

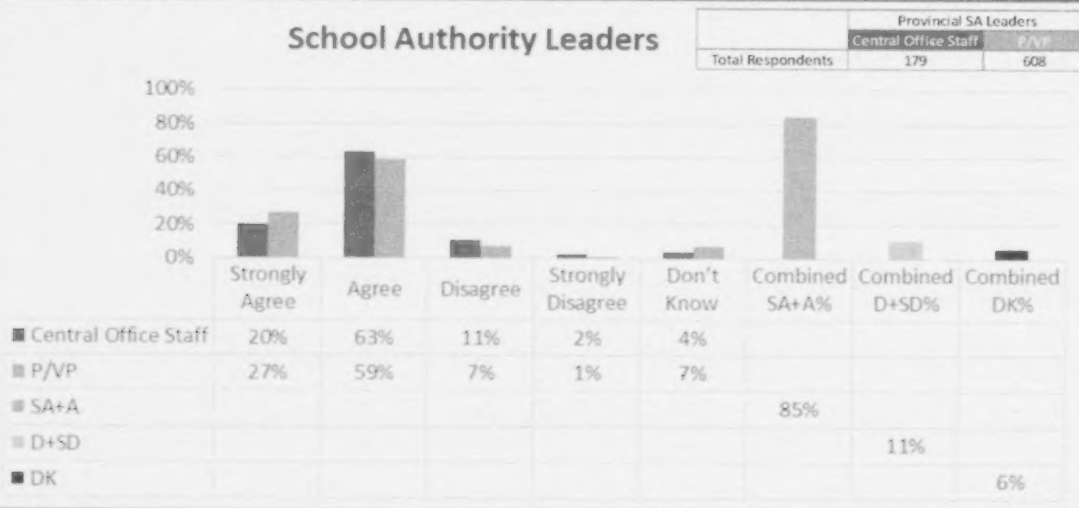
I work in a school authority where educational technology research is supported



17c

I work in a school authority where decision making related to educational technology is informed by data/research

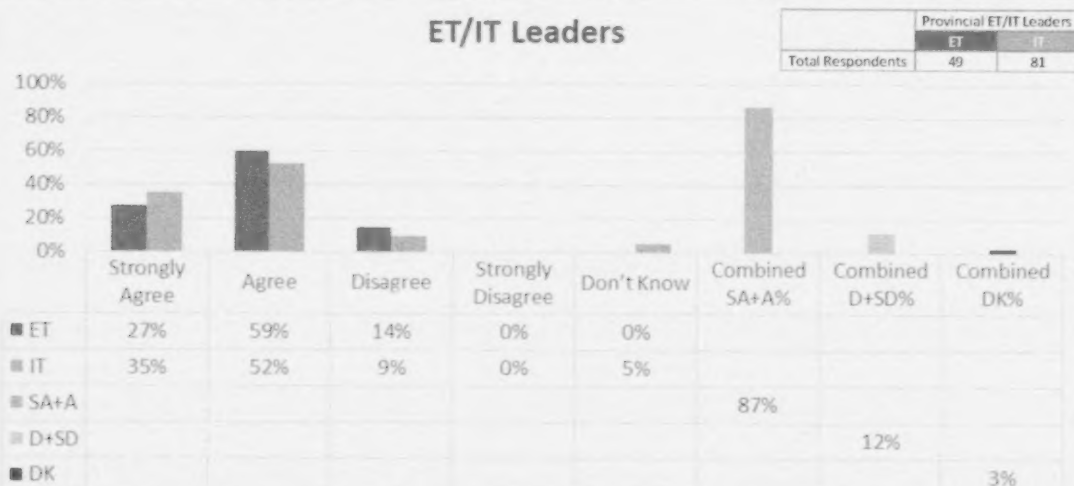
School Authority Leaders



17d

I work in a school authority where decision making related to educational technology is informed by data/research

ET/IT Leaders

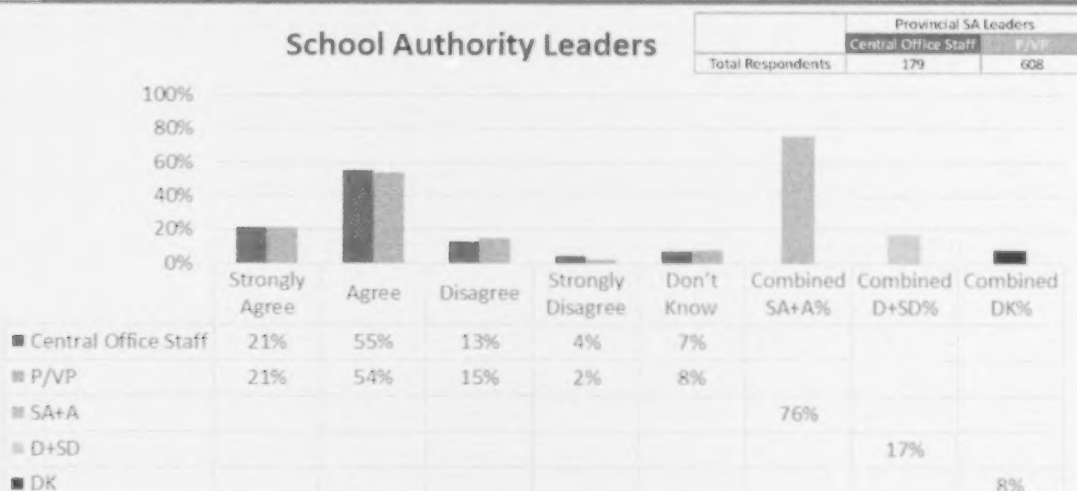




17e

I work in a school authority where educational technology investments are targeted to areas of greatest need

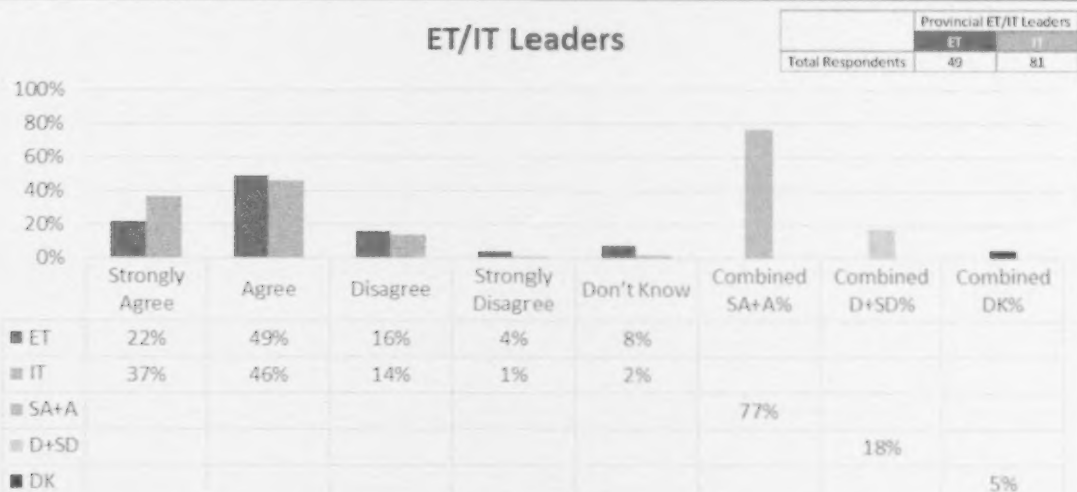
School Authority Leaders



17f

I work in a school authority where educational technology investments are targeted to areas of greatest need

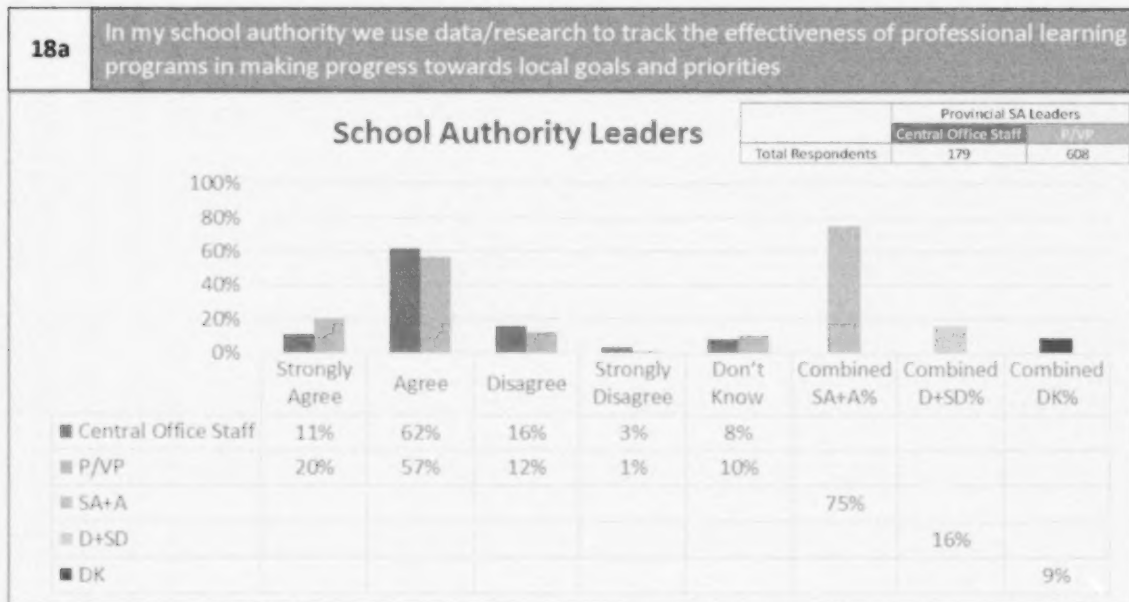
ET/IT Leaders



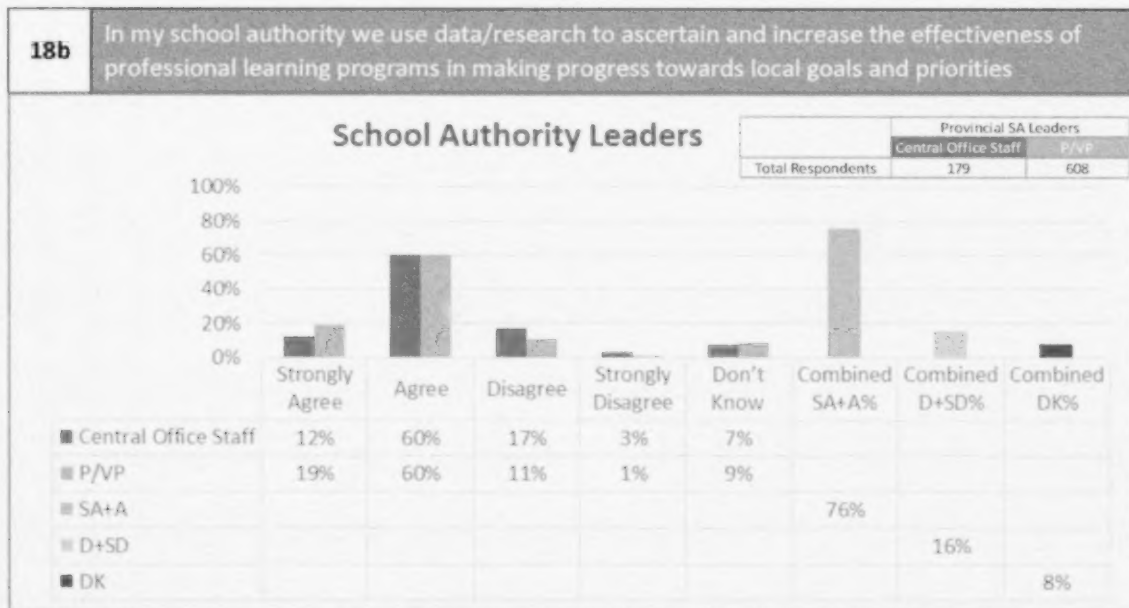


G. School authority use of data/research to:

1. Track the Effectiveness of Professional Learning Programs

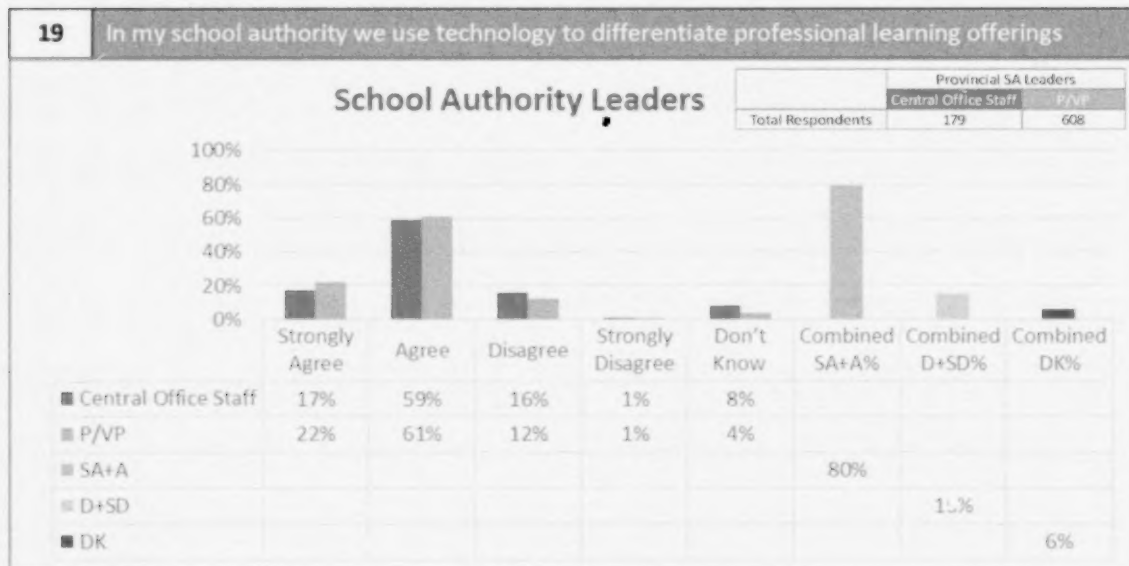


2. Ascertain and Increase the Effectiveness of Professional Learning Programs



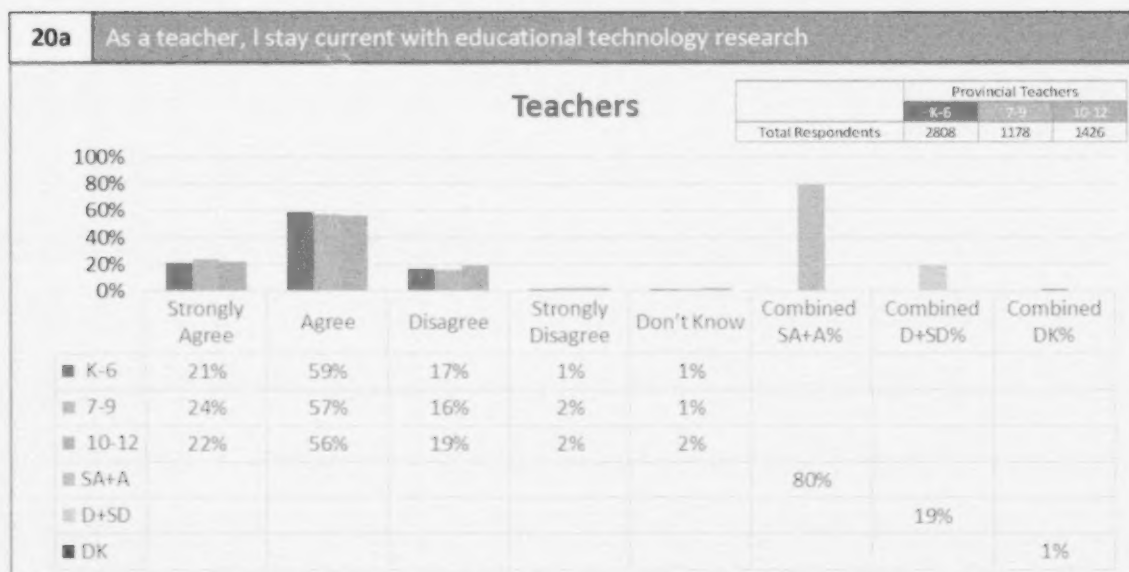
H. School authority use of technology to:

1. Differentiate Professional Learning Offerings Programs



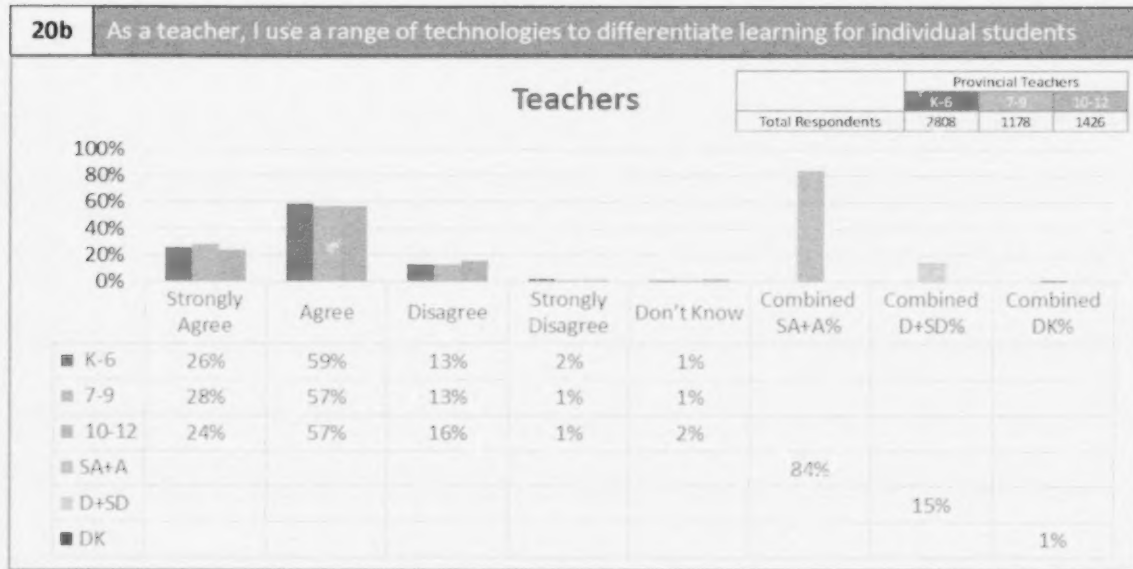
I. Teacher technology use

1. Stay Current with Educational Technology Research

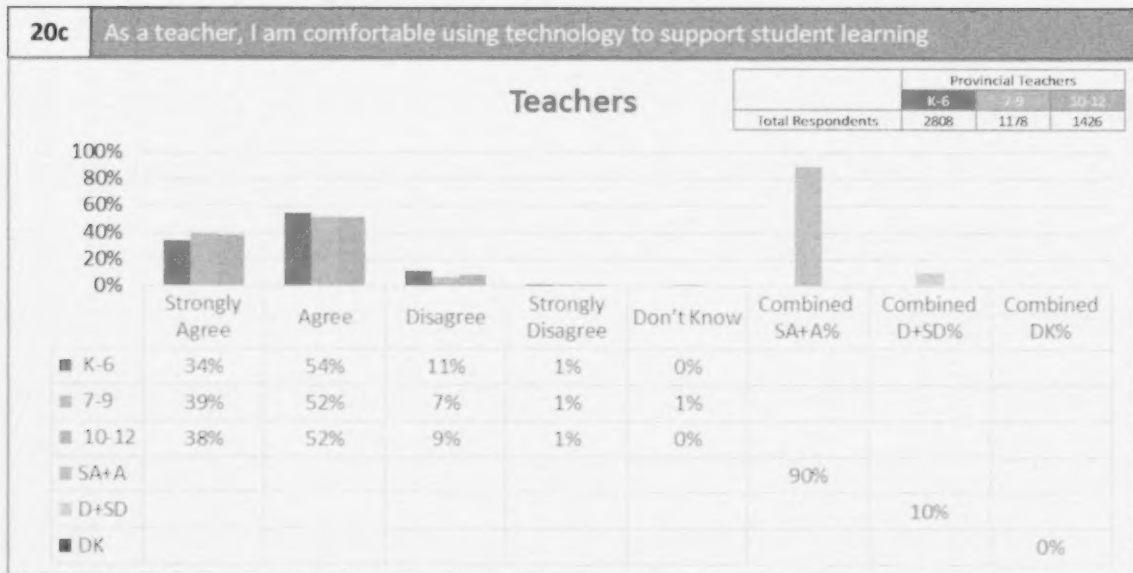




2. Use Technology to Differentiate Learning

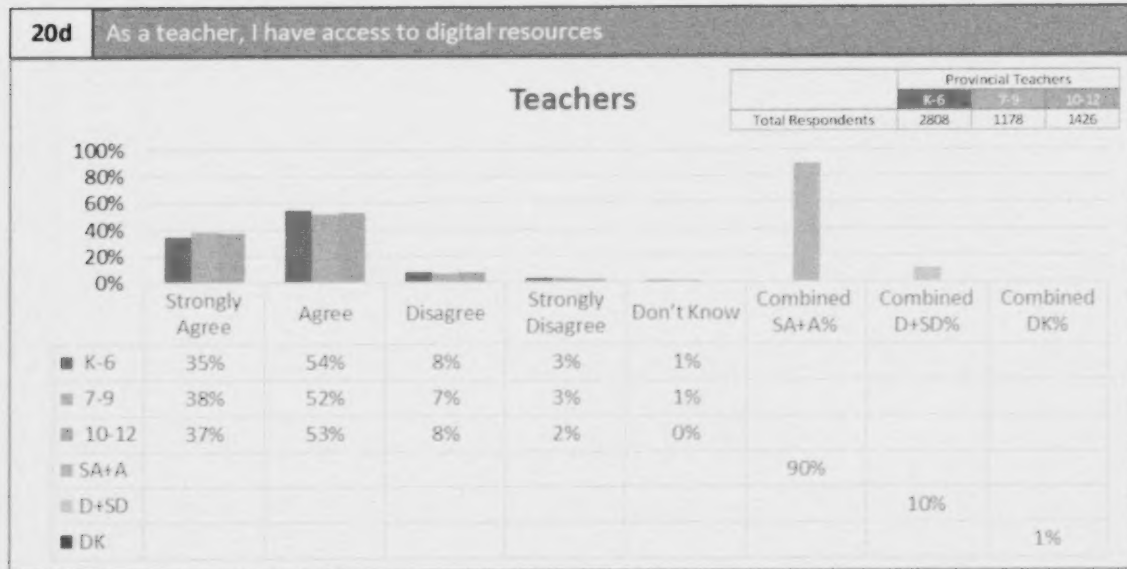


3. Am Comfortable Using Technology to Support Learning

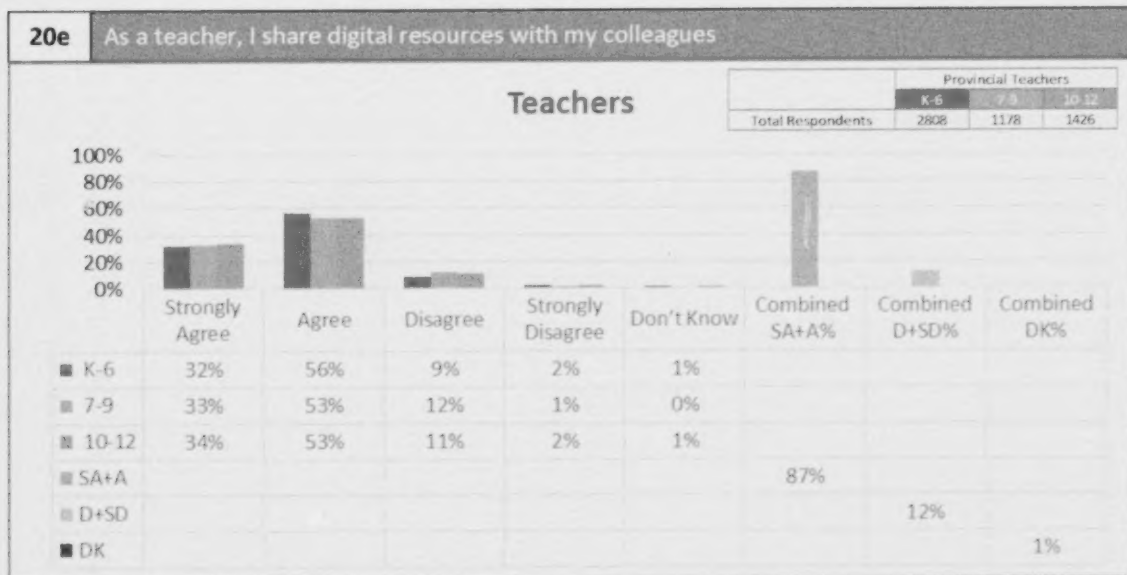




4. Have Access to Digital Resources



5. Share Digital Resources

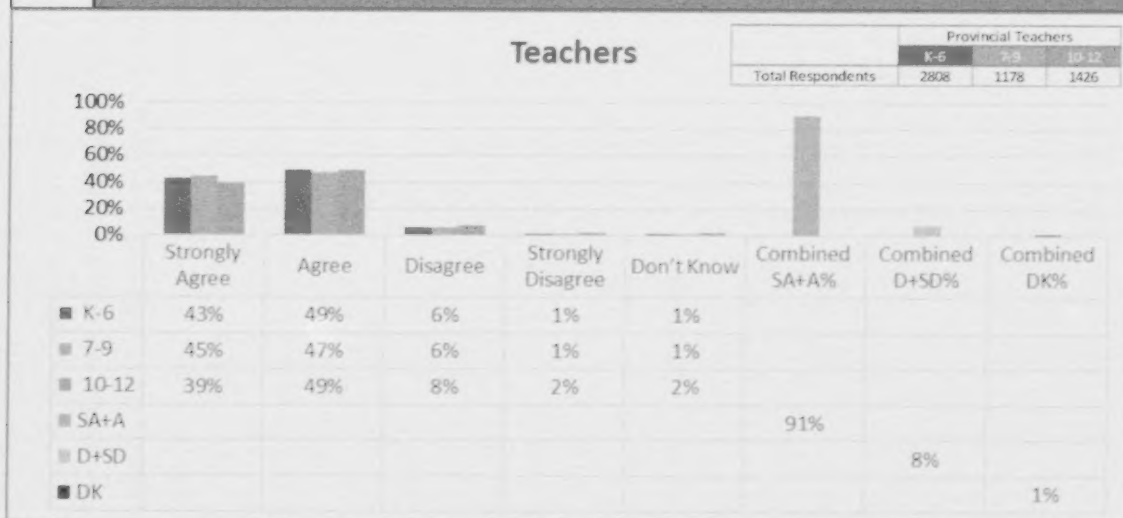




6. Believe Technology is an Integral Component

20f

As a teacher, I believe that the use of technology is an integral component to help students learn

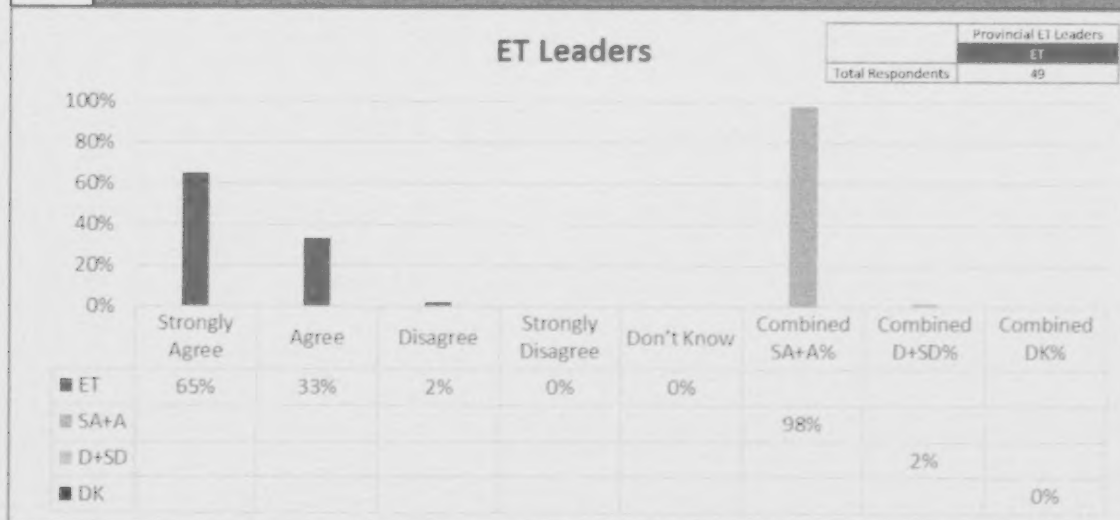


J. As an ET Leader I Support the Building of Teacher Capacity Through Research Related to:

1. Technology

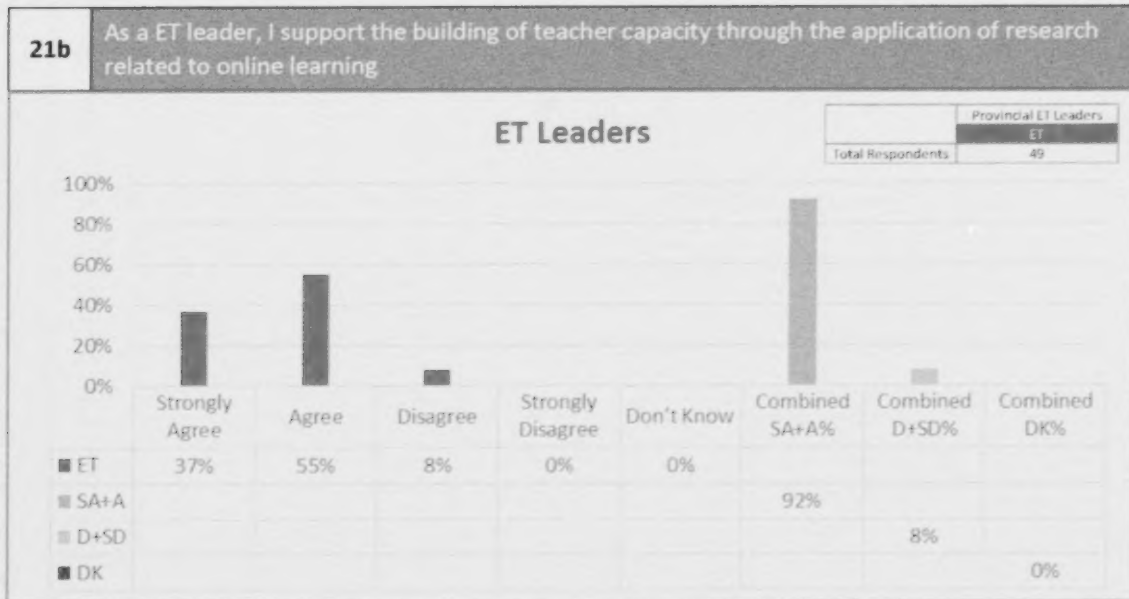
21a

As a ET leader, I support the building of teacher capacity through the application of research related to technology

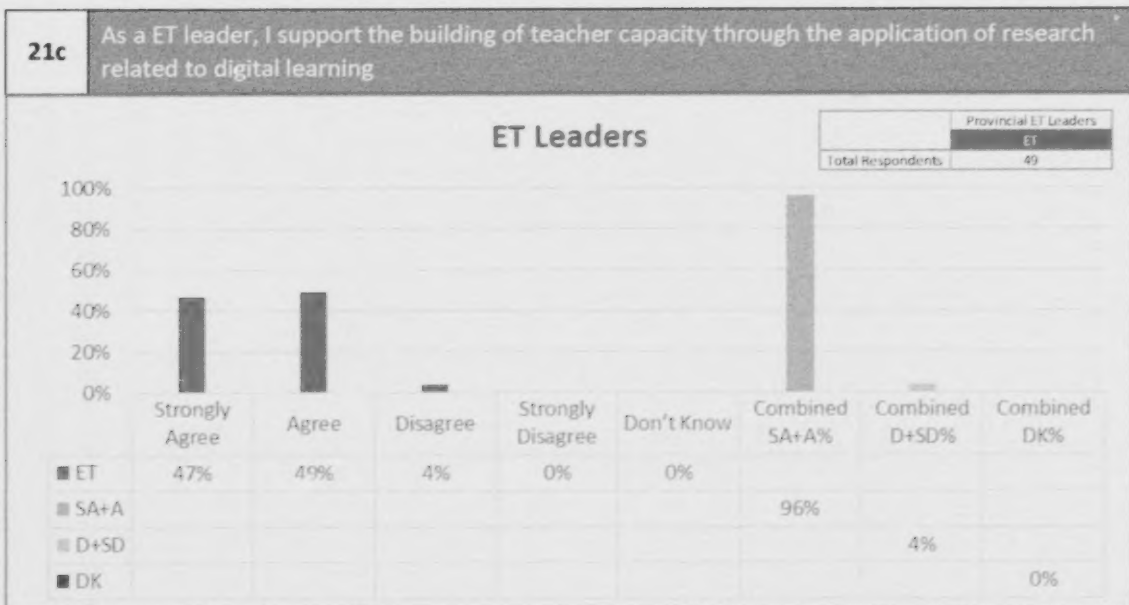




2. Online Learning

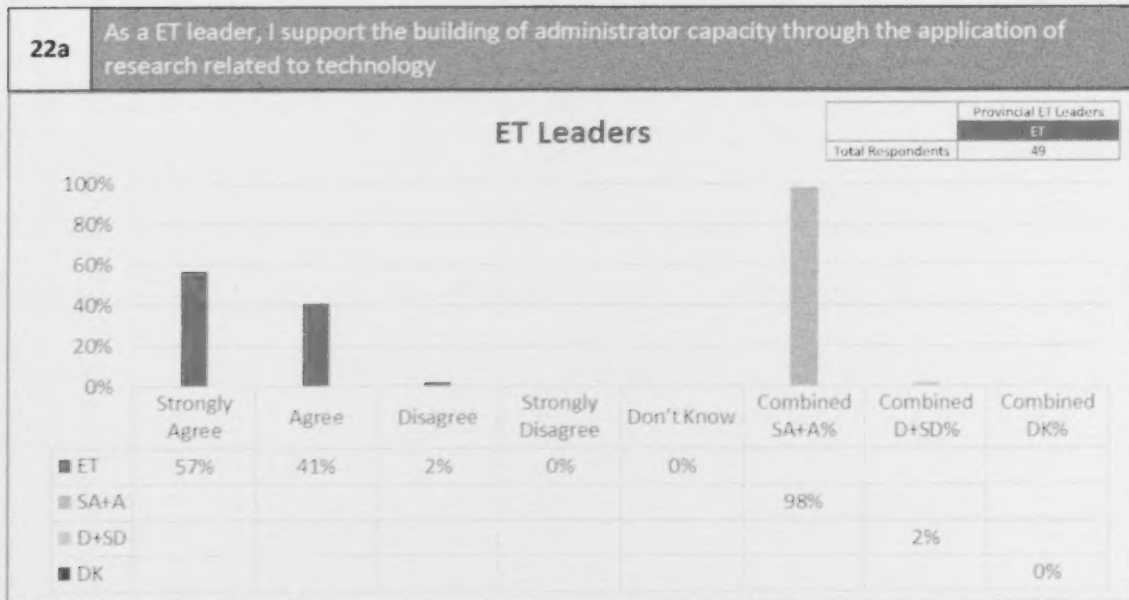


3. Digital Learning

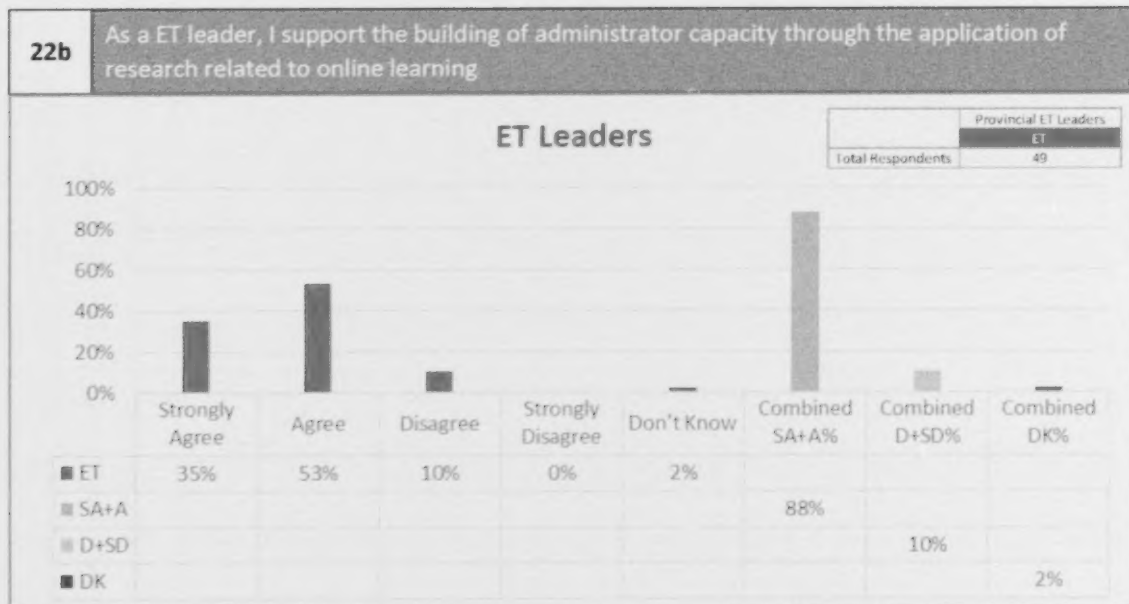


K. As an ET Leader I Support the Building of Administrator Capacity Through Research Related to:

1. Technology

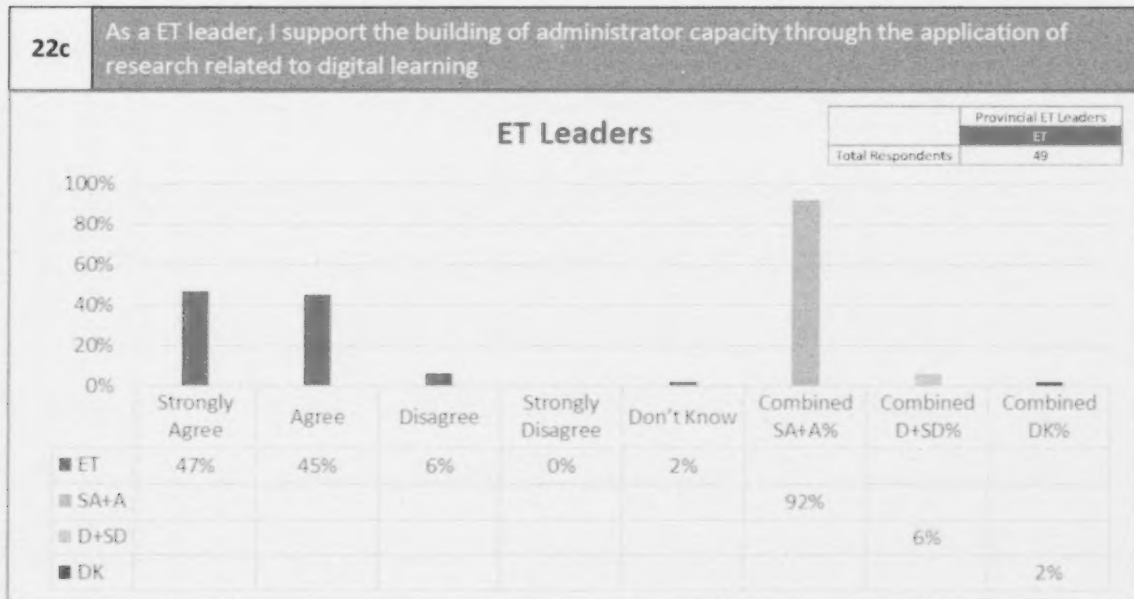


2. Online Learning



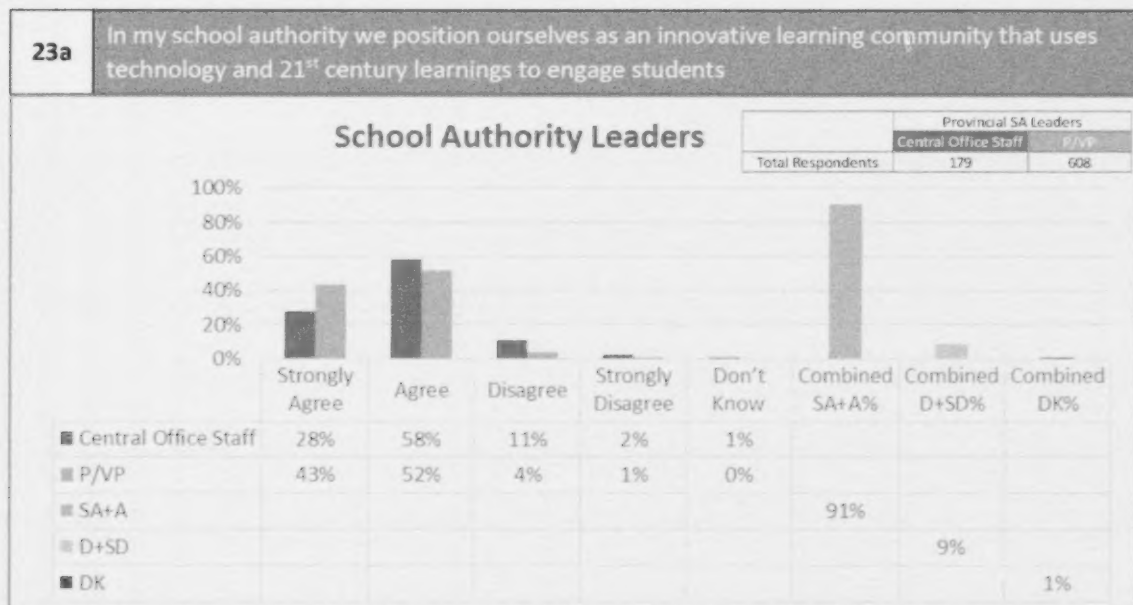


3. Digital Learning



L. School Authorities as Innovative Learning Communities

1. To Engage Students

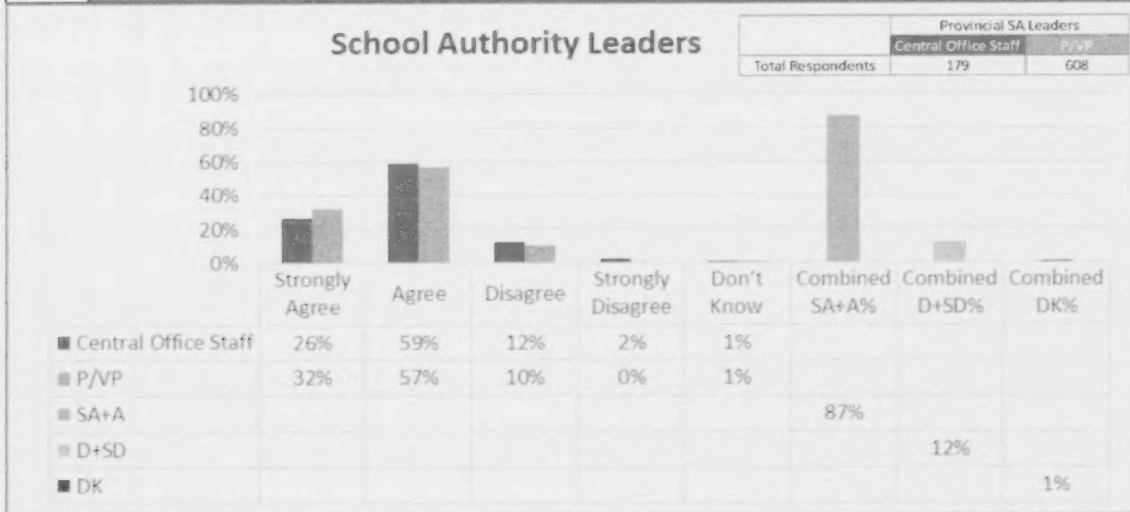




2. To Engage Teachers

23b

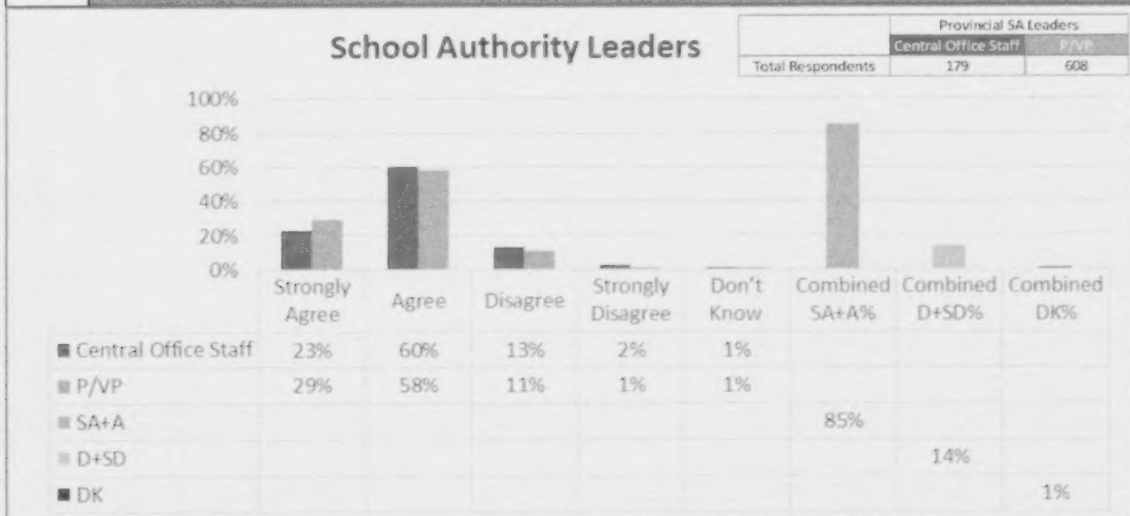
In my school authority we position ourselves as an innovative learning community that uses technology and 21st century learnings to engage teachers



3. To Engage Administrators

23c

In my school authority we position ourselves as an innovative learning community that uses technology and 21st century learnings to engage administrators



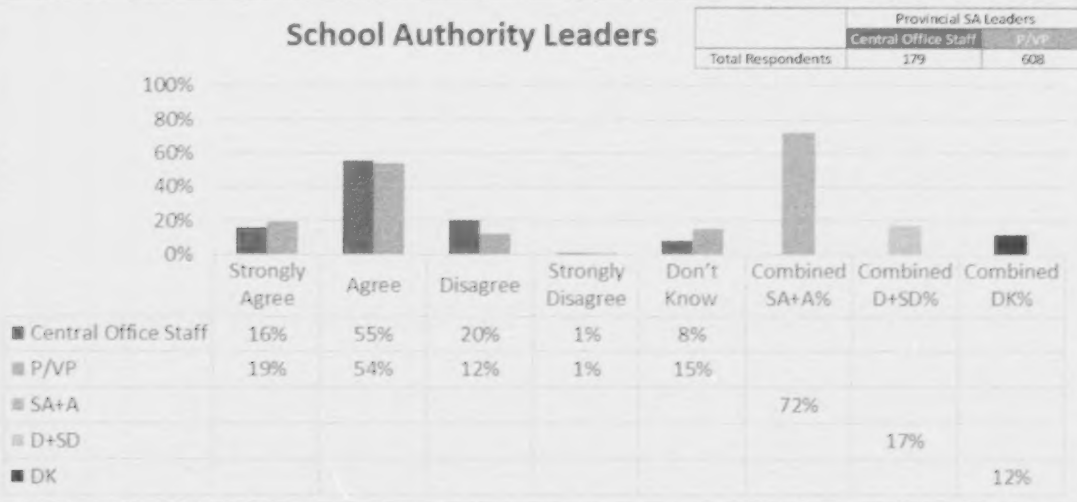


4. To Engage Other Education Professionals

23d

In my school authority we position ourselves as an innovative learning community that uses technology and 21st century learnings to engage other education professionals

School Authority Leaders

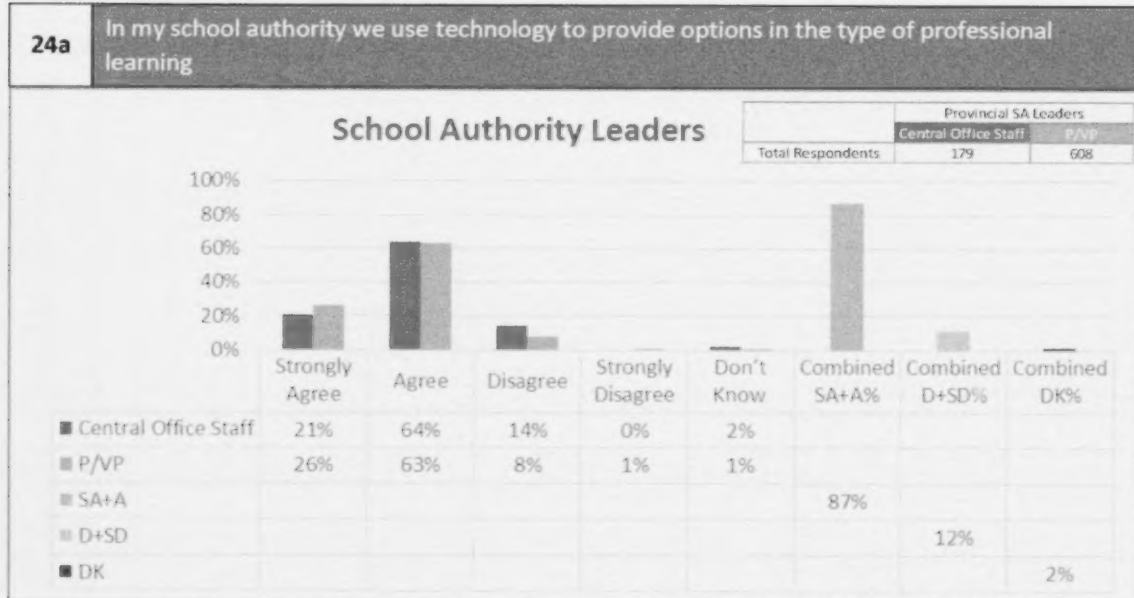




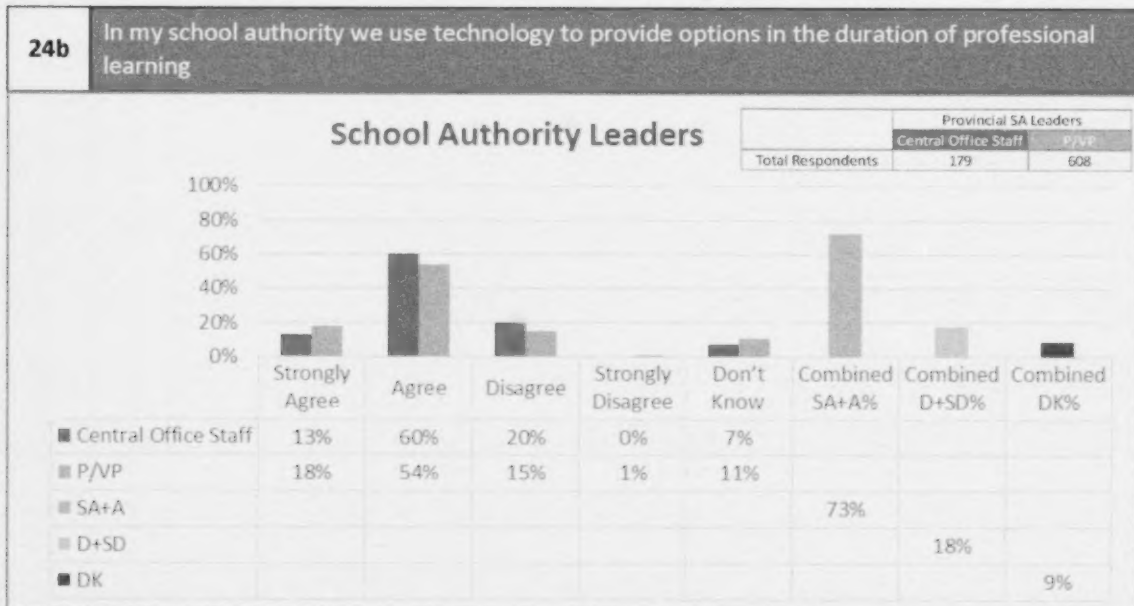
Policy Direction 3 Online Survey Results

A. School Authorities Using Technology to provide Professional Learning Options for:

1. Type of Professional Learning

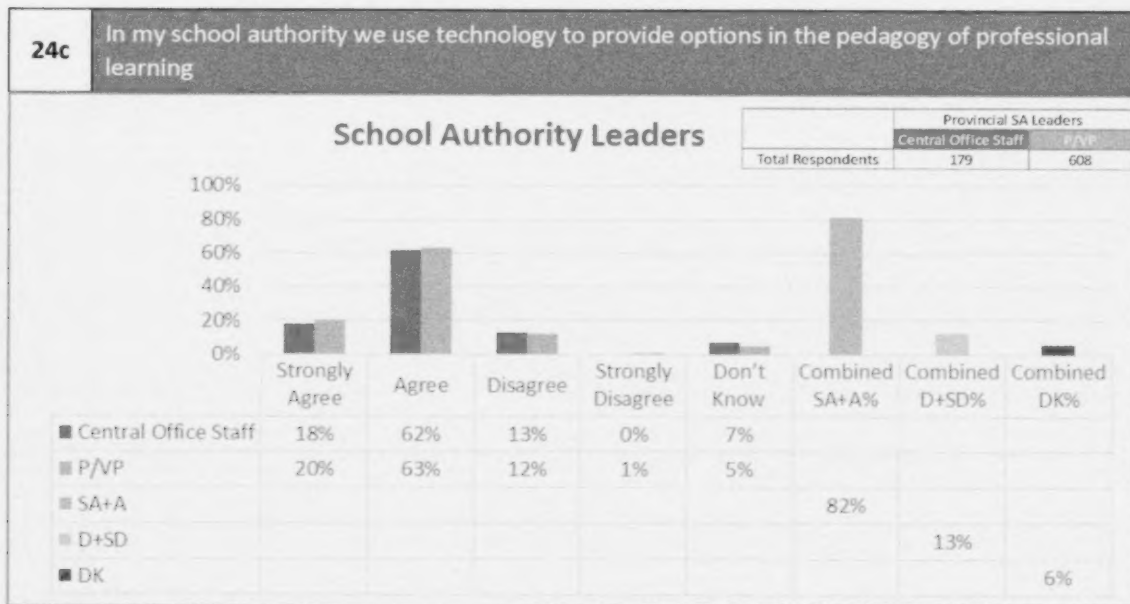


2. Duration of Professional Learning

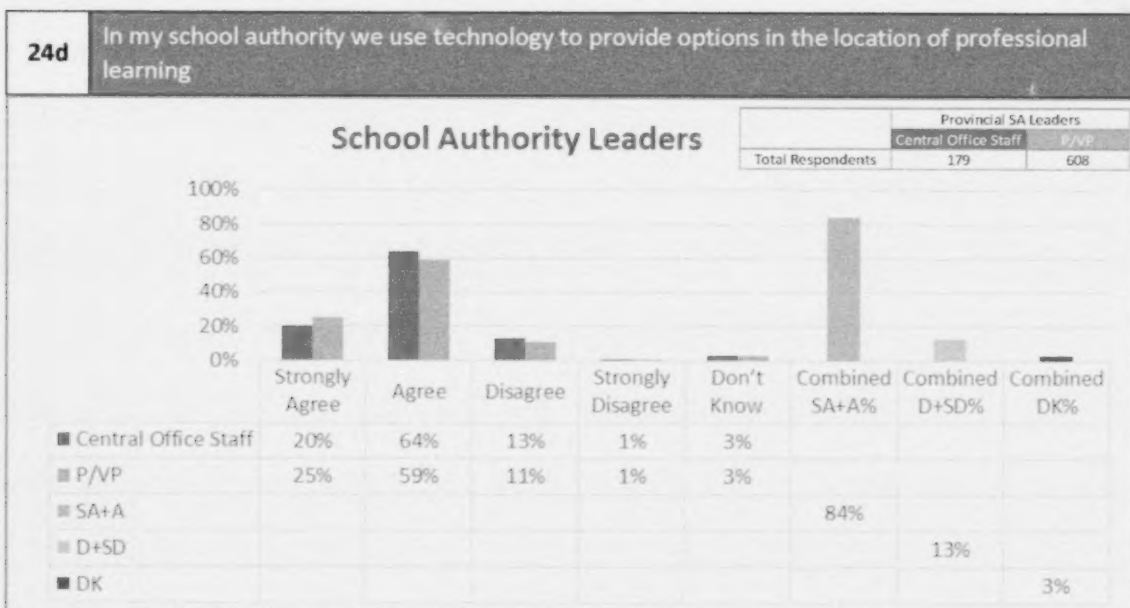




3. Pedagogy of Professional Learning

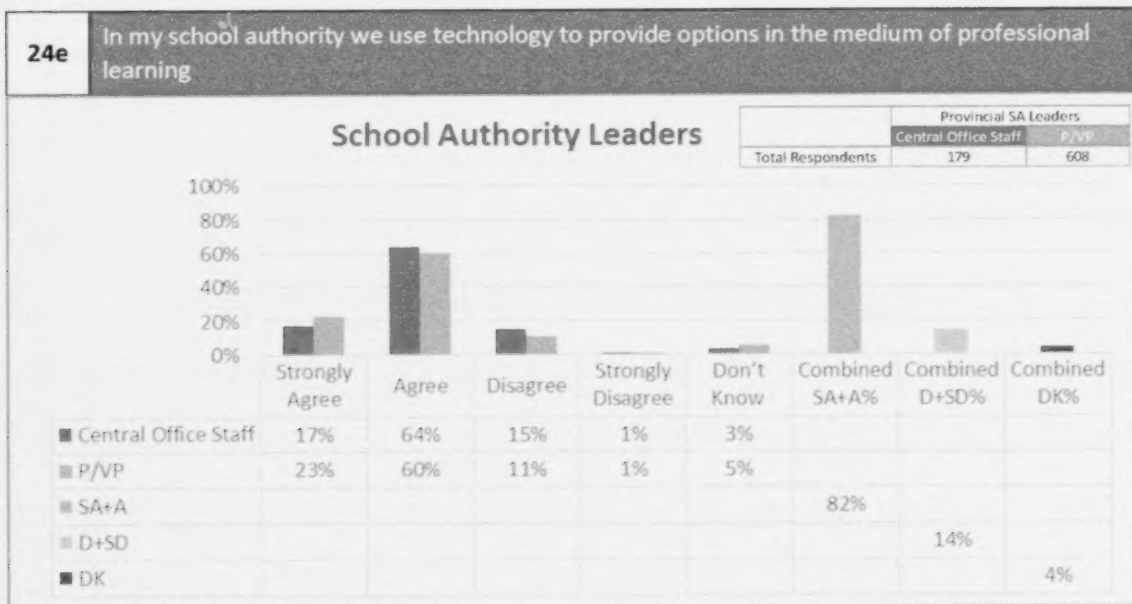


4. Location of Professional Learning

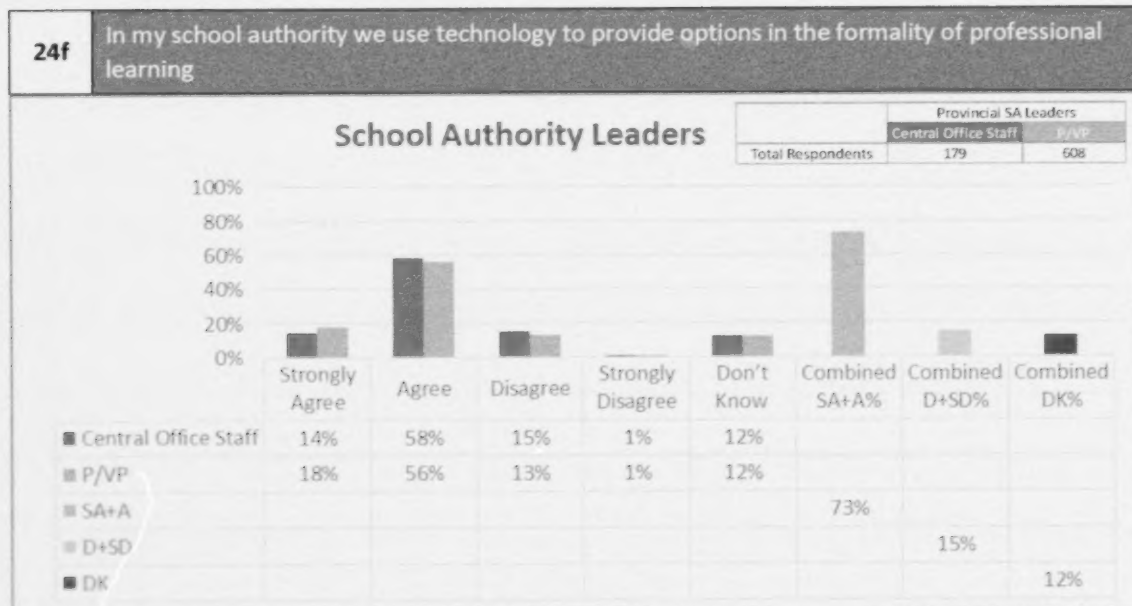




5. Medium of Professional Learning



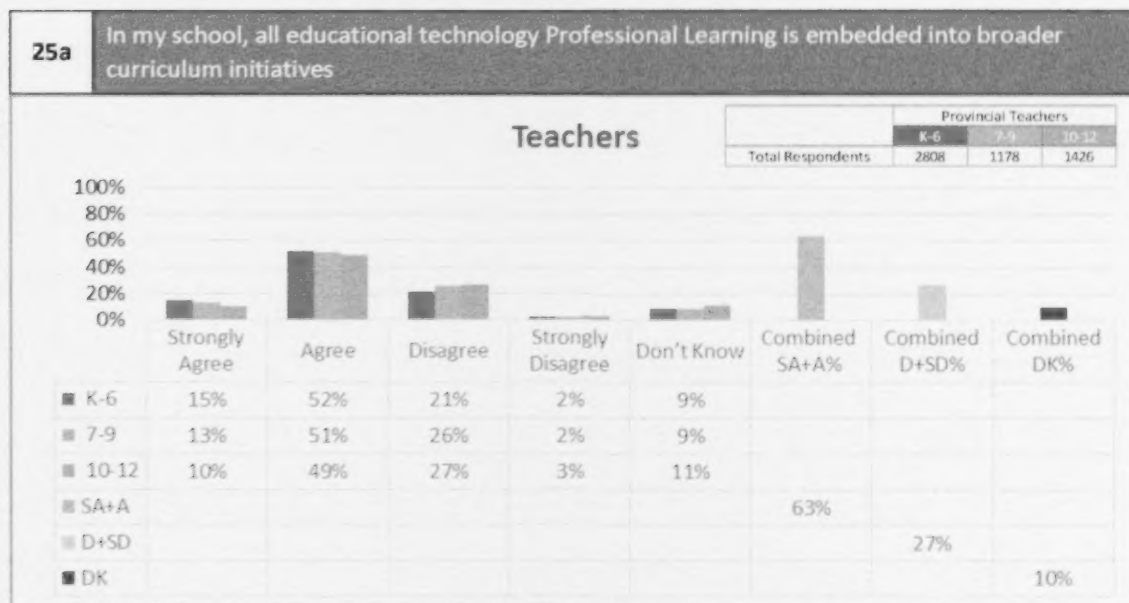
6. Formality of Professional Learning



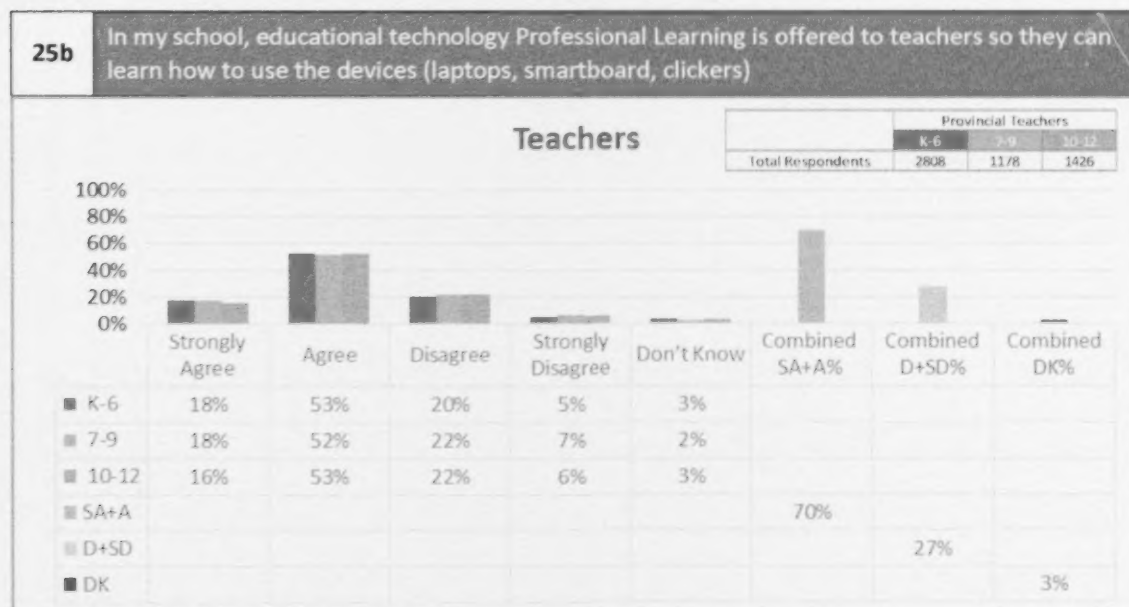


B. In My School, Technology Professional Learning is:

1. Embedded into Broader Curriculum Initiatives

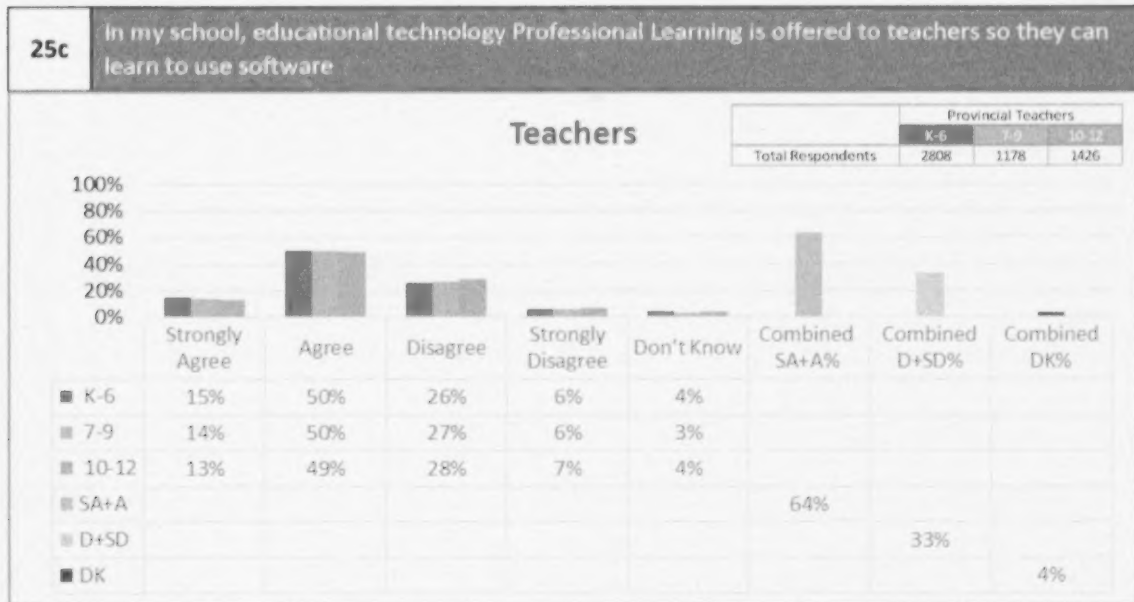


2. Offered to Show Teachers How to Use Devices

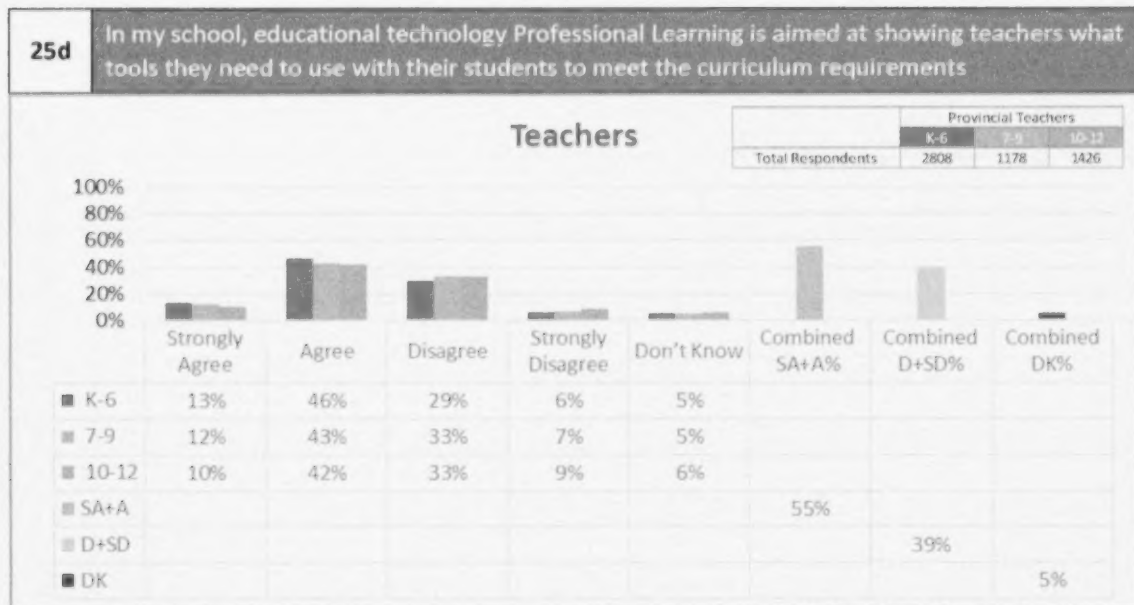




3. Offered to Learn Software



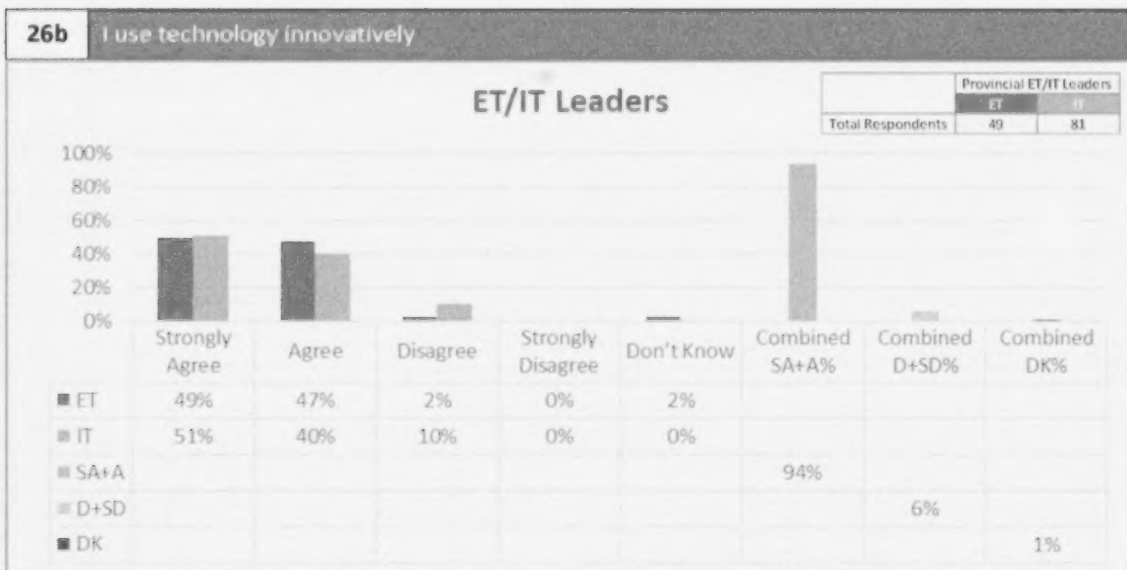
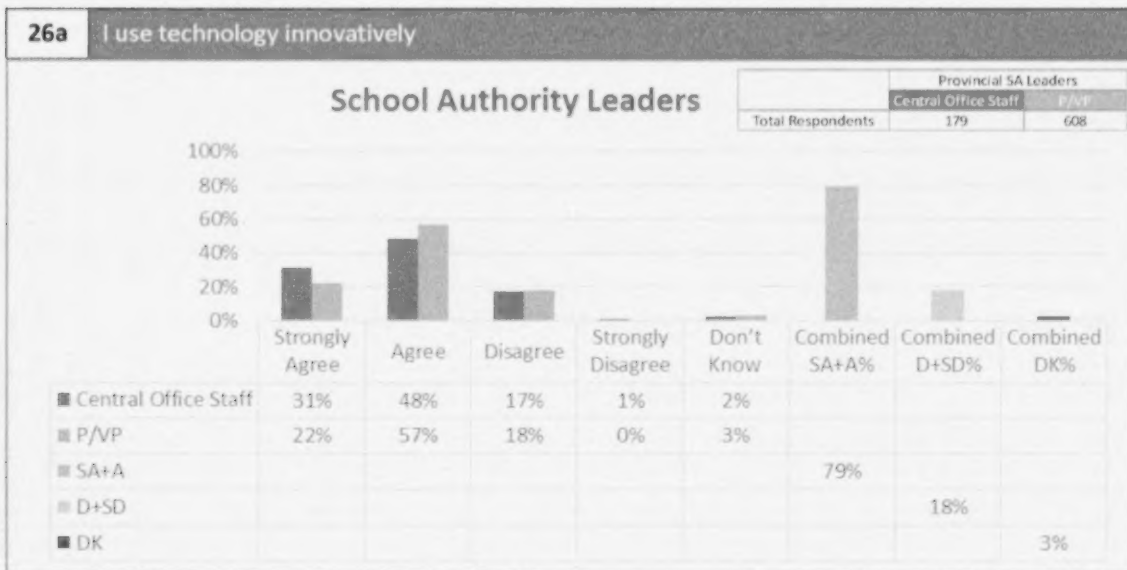
4. Offered to Align Tools with Curriculum





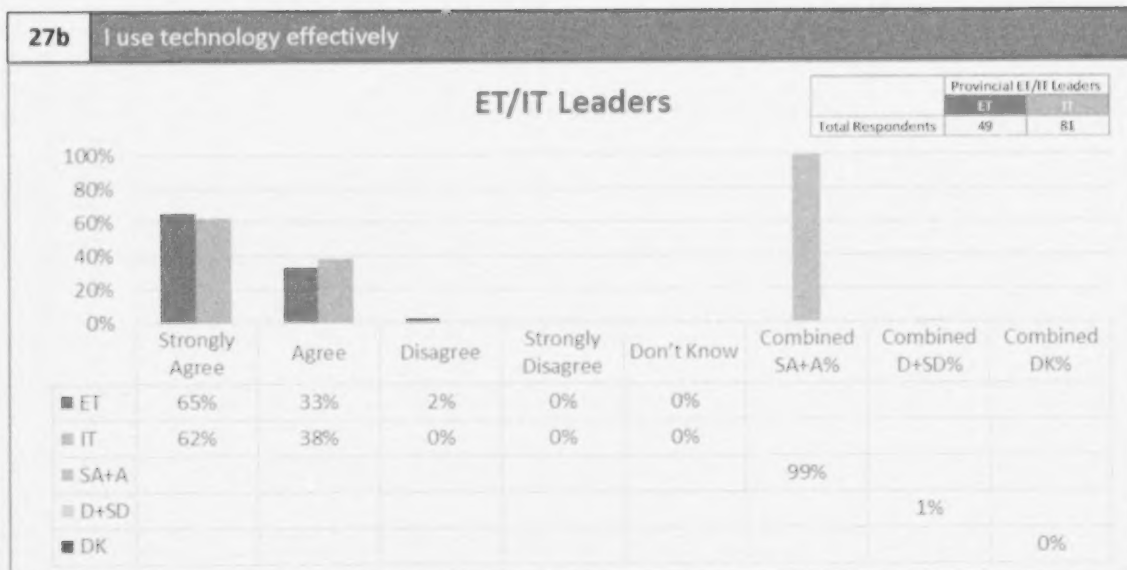
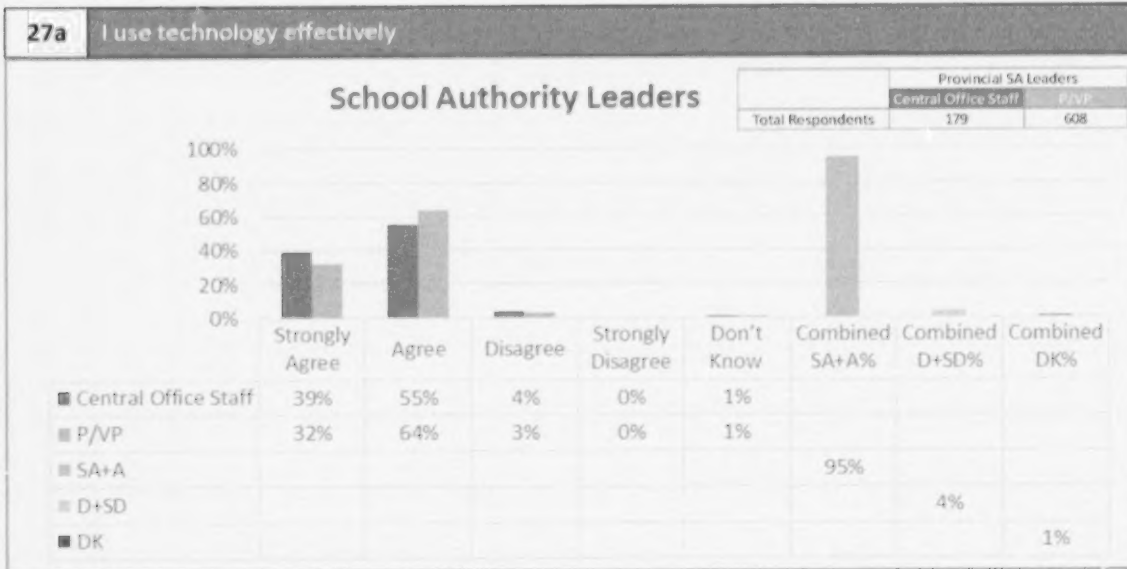
C. Innovative, effective and efficient use of technology:

1. Innovatively



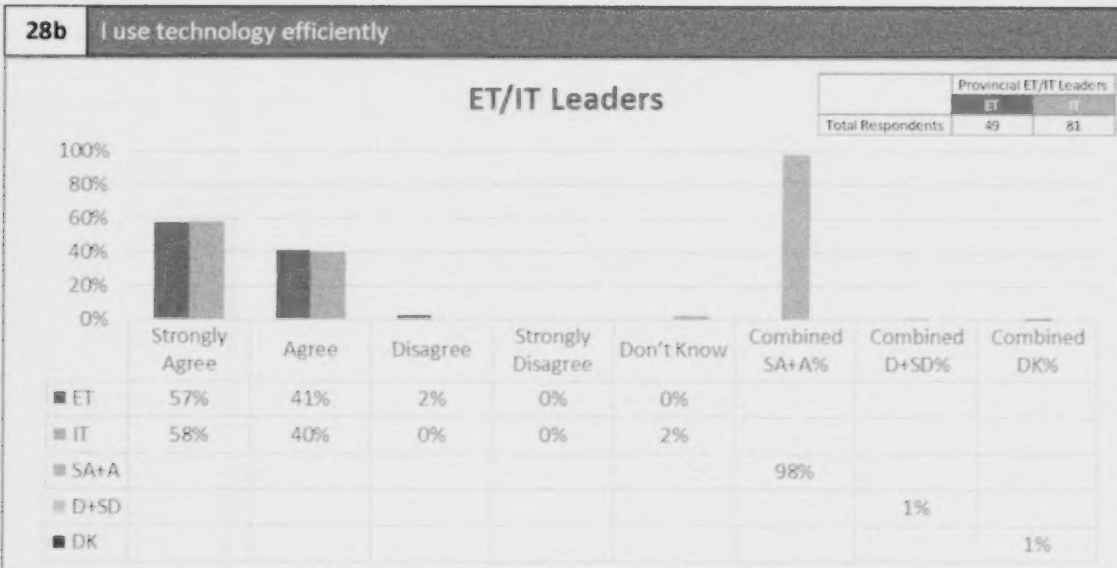
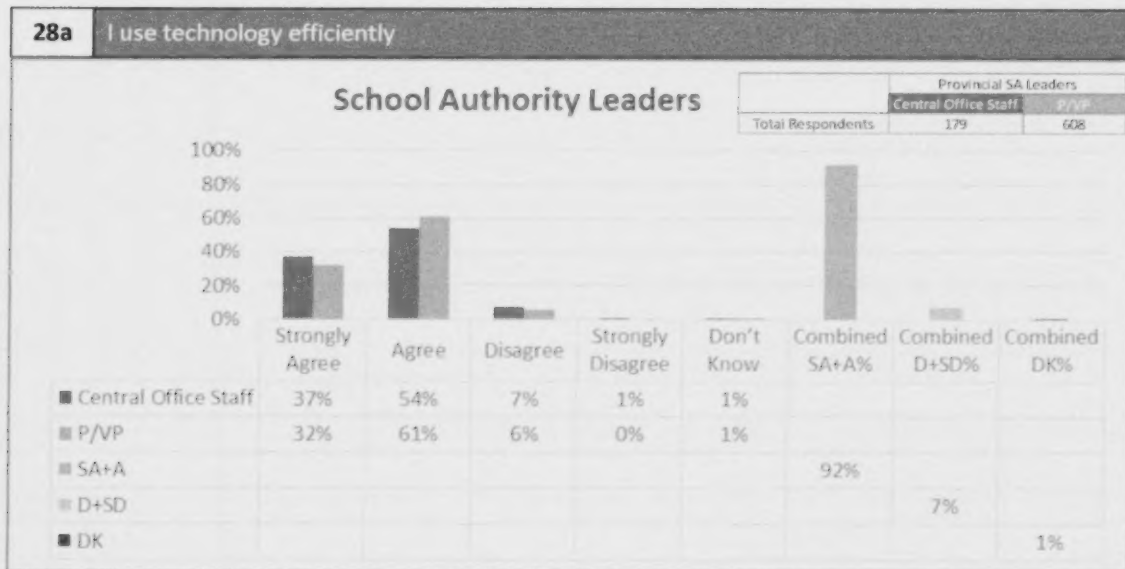


2. Effectively





3. Efficiently



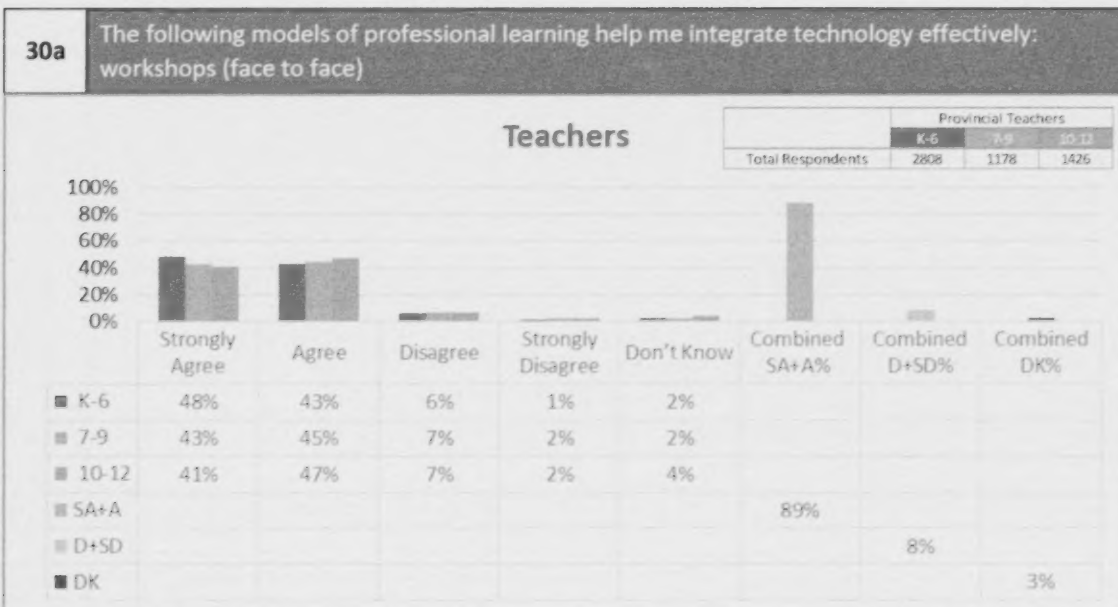


D. Access to Professional Learning



E. Models of Professional Learning

1. Workshops Face to Face

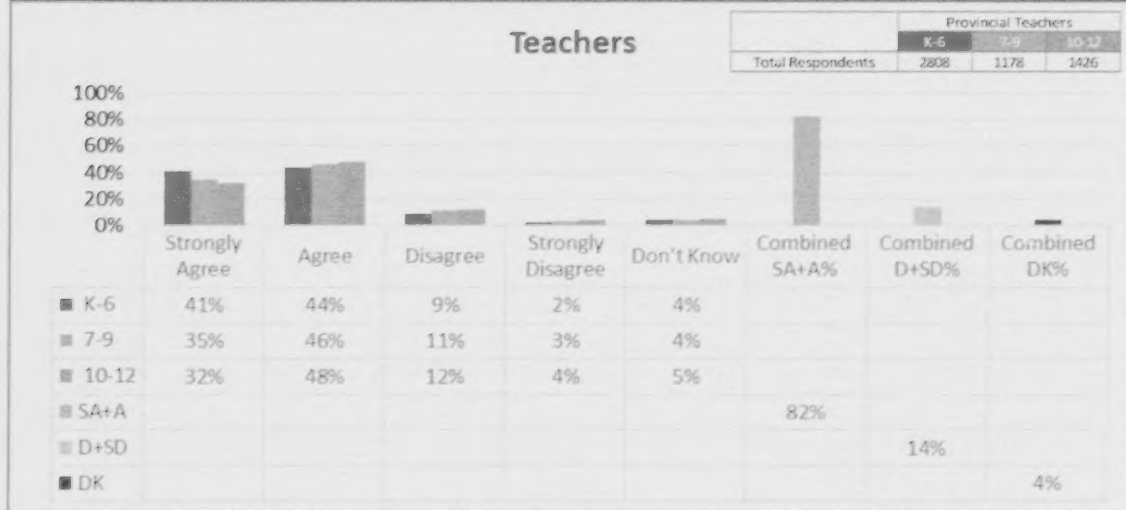




2. Embedded Coaching/Mentoring

30b

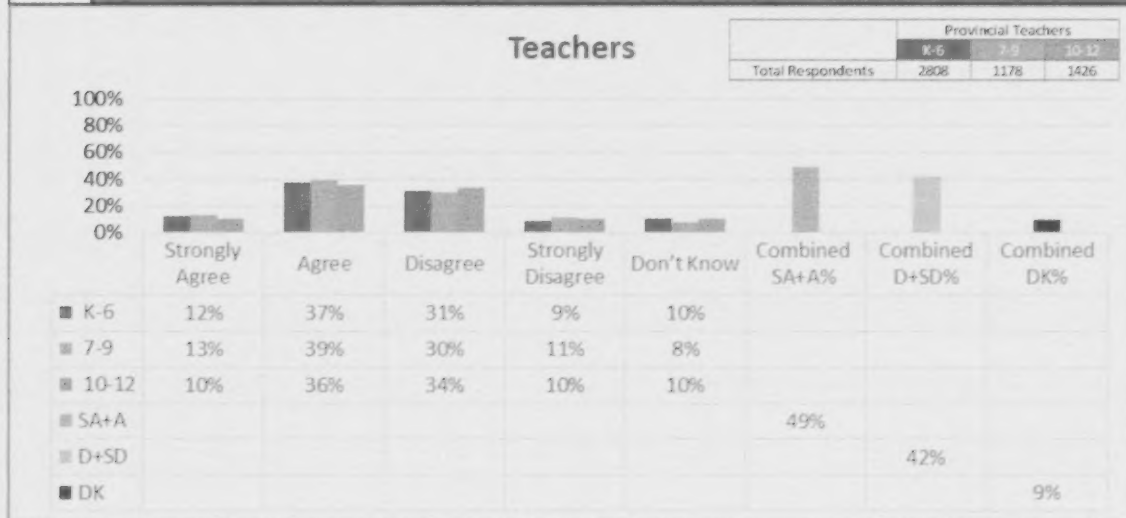
The following models of professional learning help me integrate technology effectively: job embedded coaching/mentoring



3. Web-based Supports

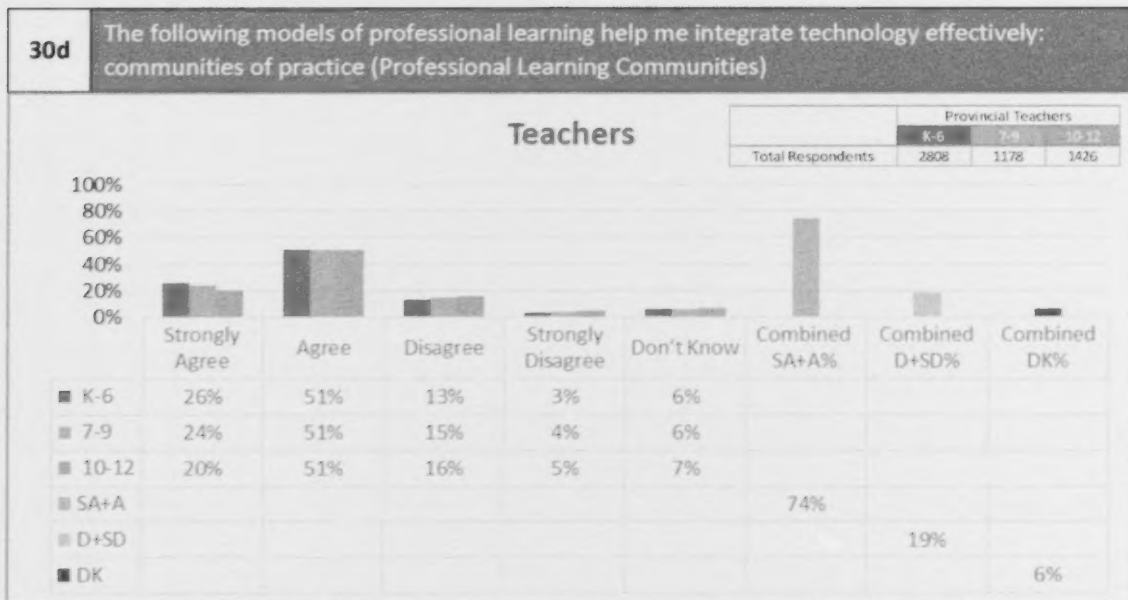
30c

The following models of professional learning help me integrate technology effectively: web-based supports such as discussion groups, Wikis, Webinars, Twitter



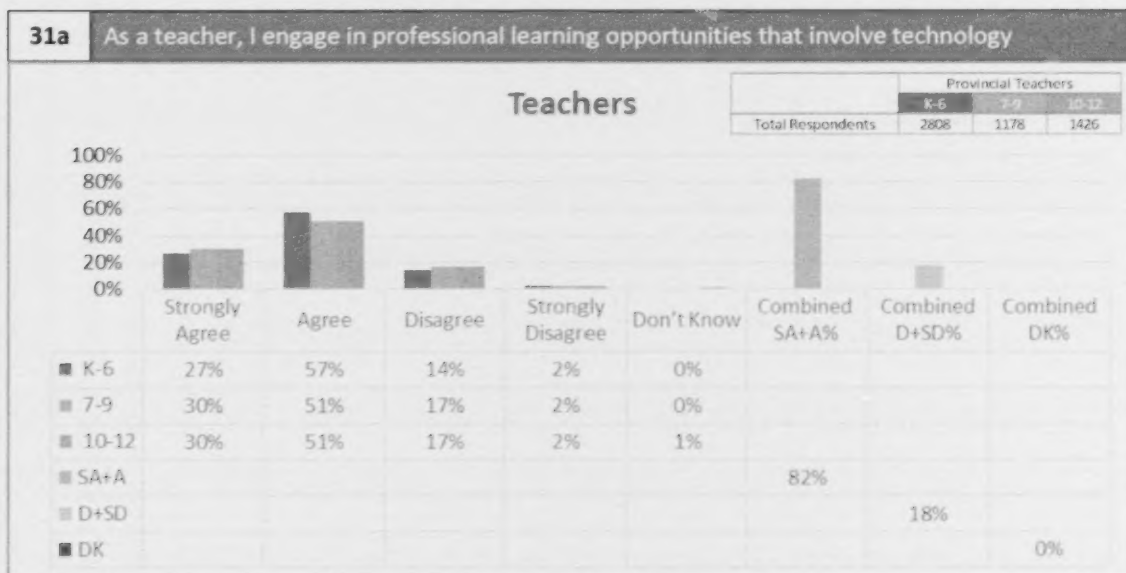


4. Communities of Practice

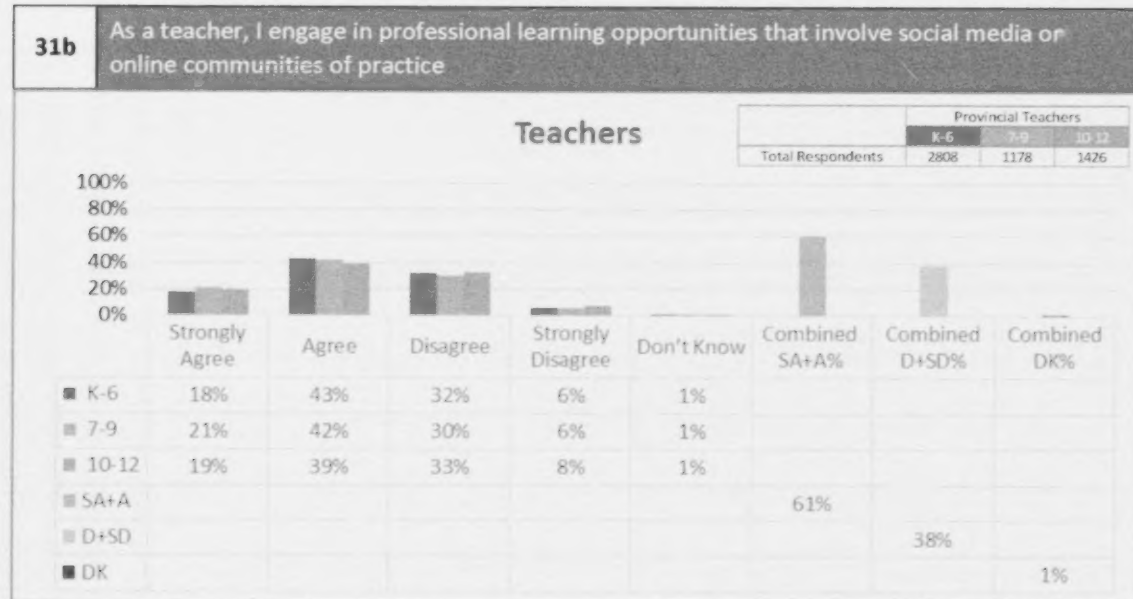


F. As a Teacher, I Engage in Professional Learning Opportunities that:

1. Involve Technology



2. Involve Social Media or Online Communities of Practice

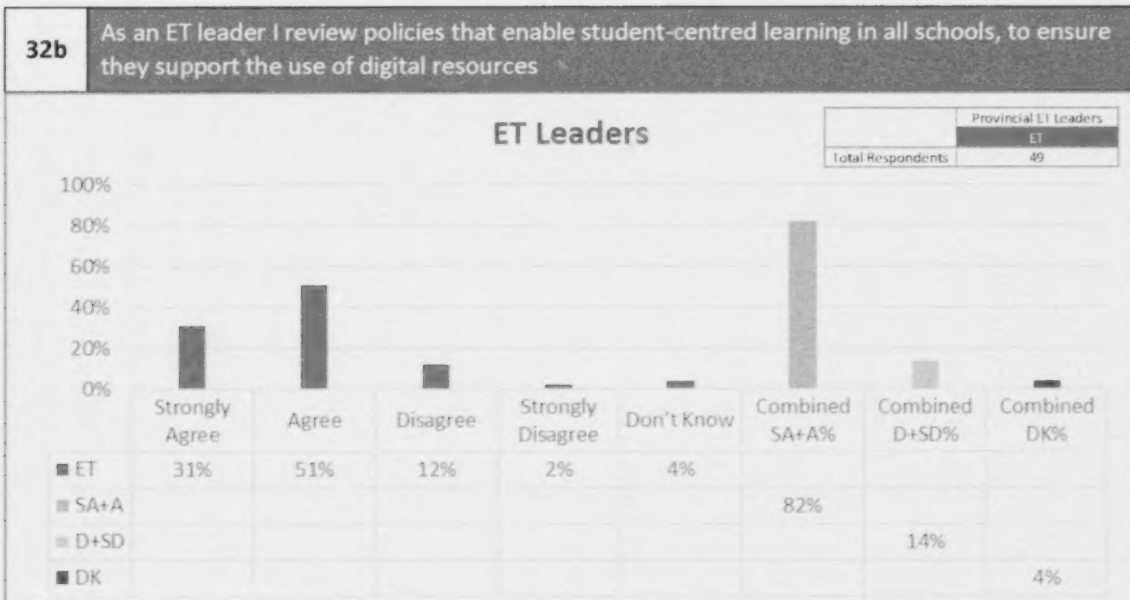
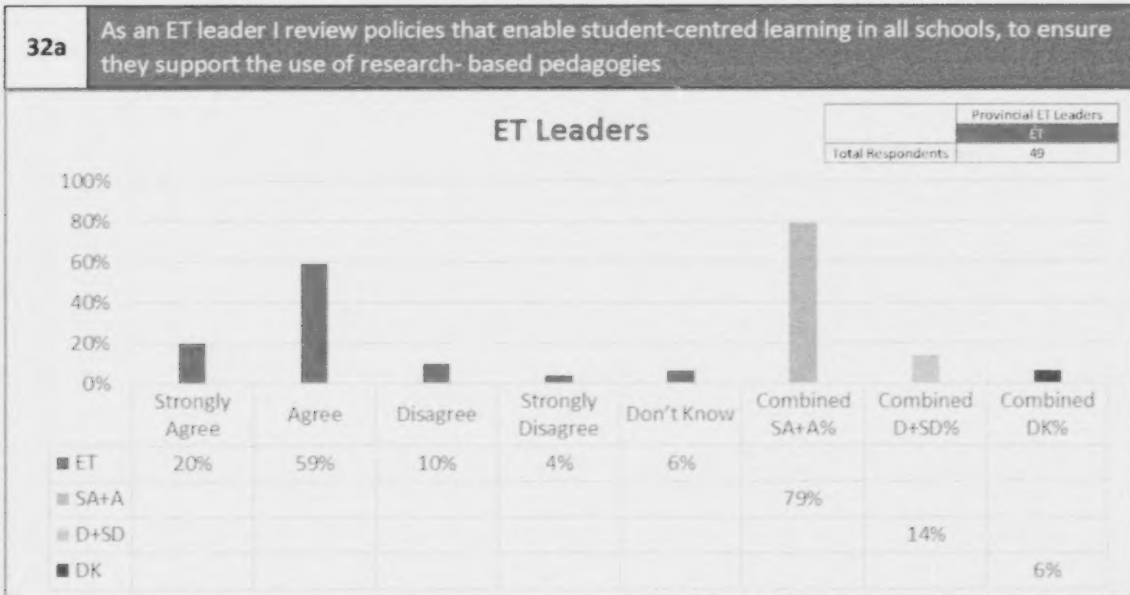




Policy Direction 4 Online Survey Results

A. Policies

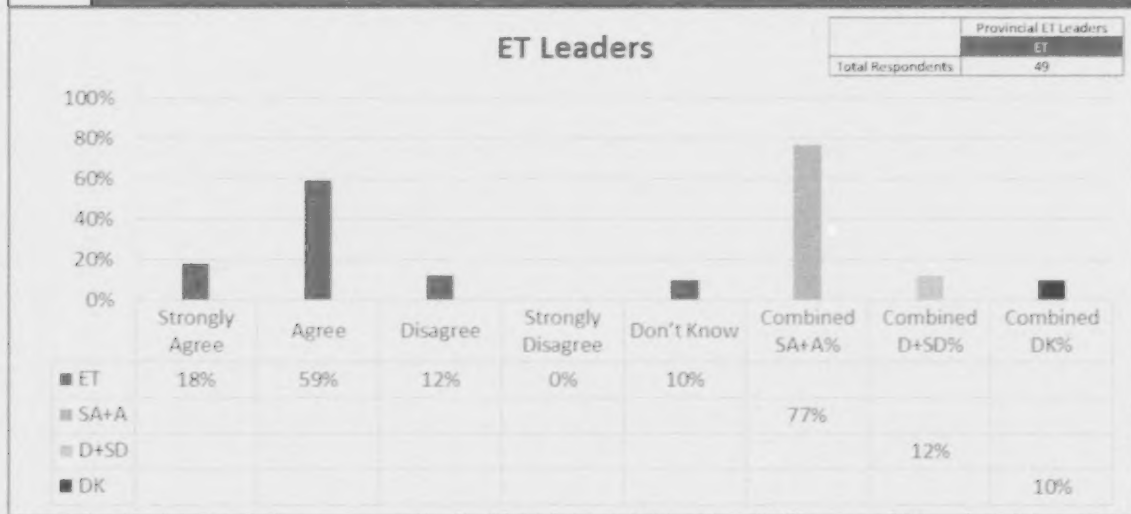
1. Reviewing Policies





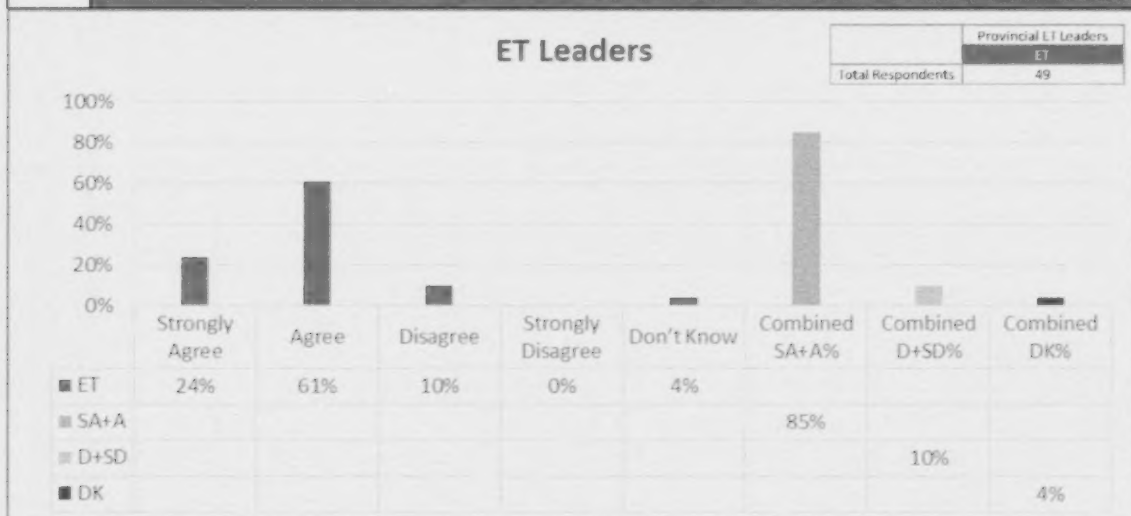
32c

As an ET leader I review policies that enable student-centred learning in all schools, to ensure they support the use of support systems



32d

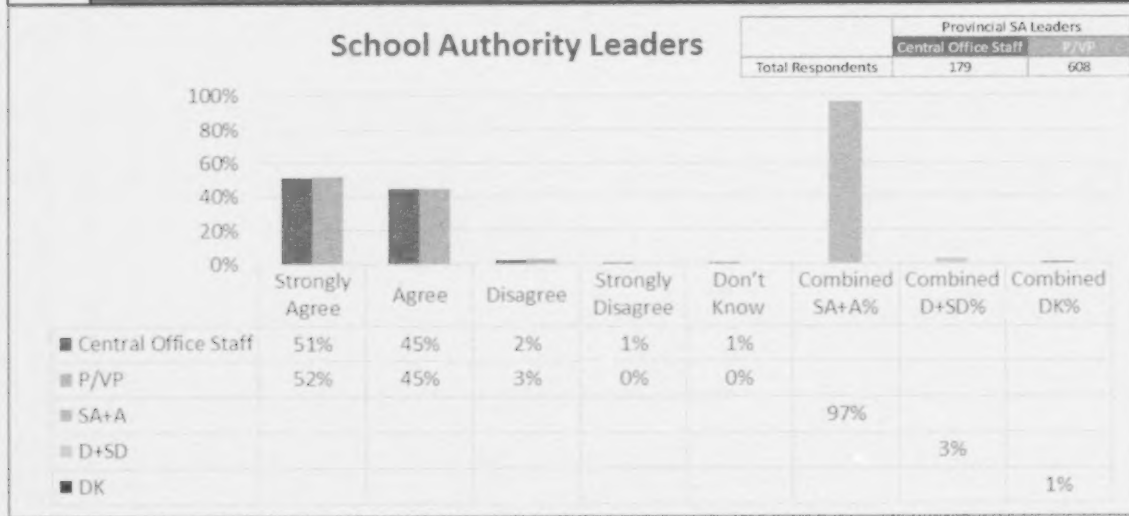
As an ET leader I review policies that enable student-centred learning in all schools, to ensure they support the use of digital environments



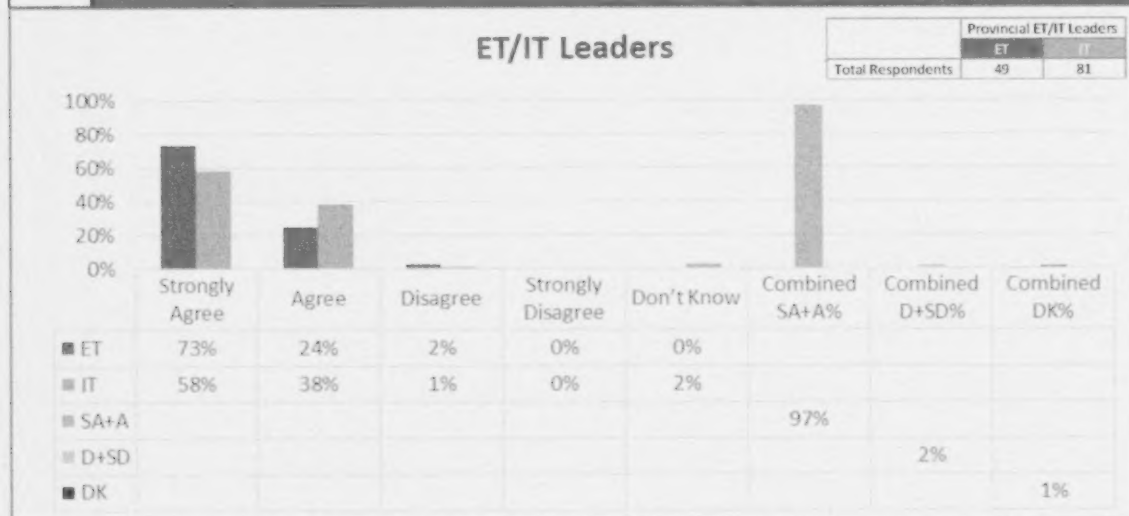


B. Champion Effective Use of Technology

33a In my school authority, I champion effective use of technology for learning

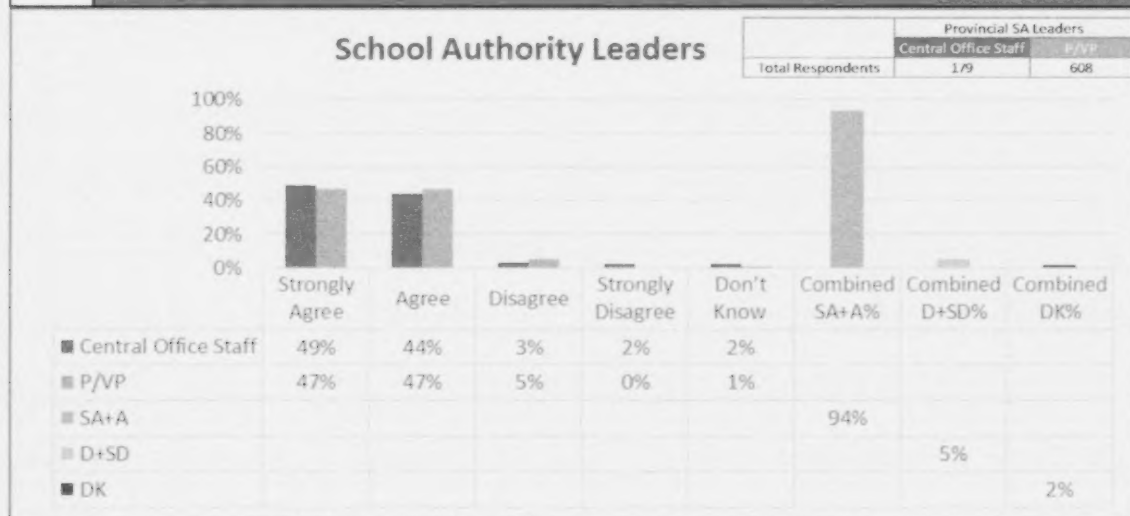


33b In my school authority, I champion effective use of technology for learning

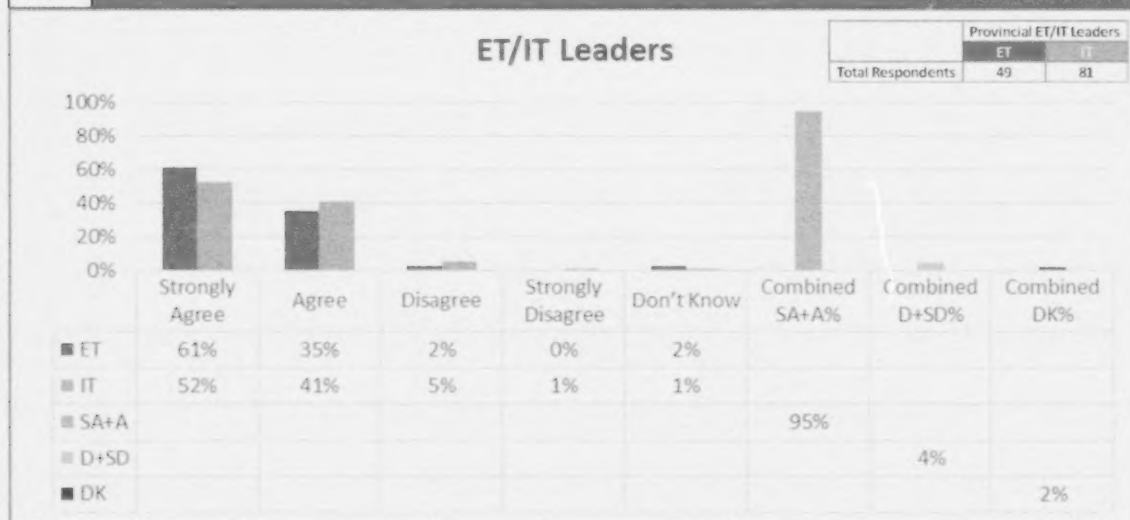




33c In my school authority, I champion effective use of technology for learning



33d In my school authority, I champion effective use of technology for learning



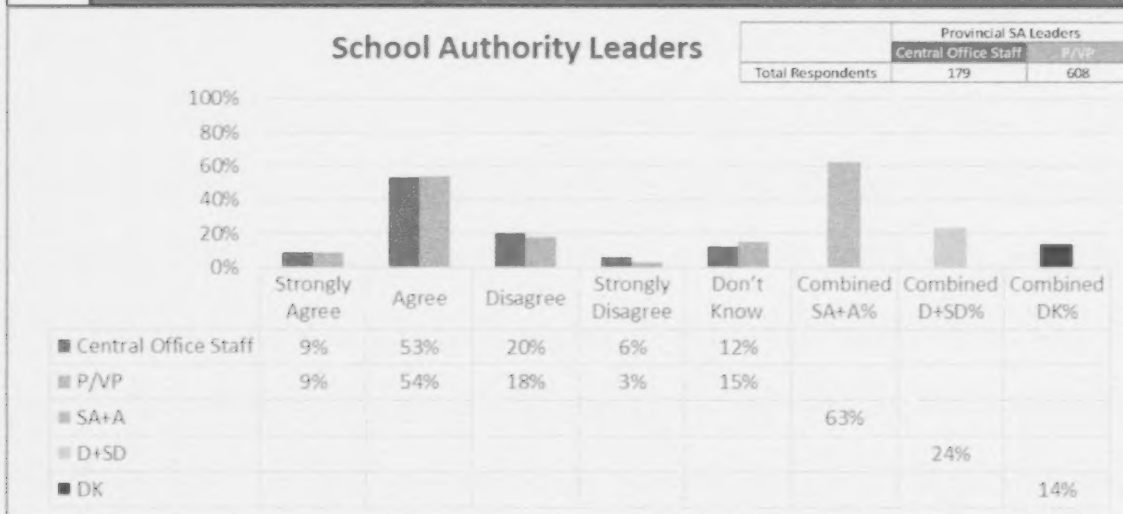


C. Clarity in Policies and Procedures that Govern Use

1. Ministry Policies: Educational Use of Technology

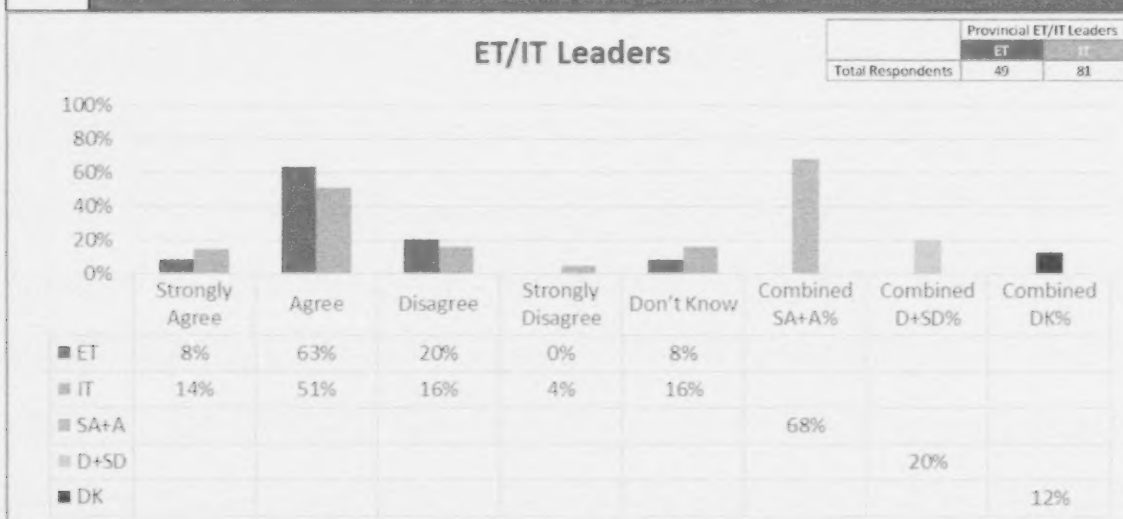
34a

In my opinion, the Ministry has clarity in the policies/procedures that govern educational uses of technology in all schools



34b

In my opinion, the Ministry has clarity in the policies/procedures that govern educational uses of technology in all schools

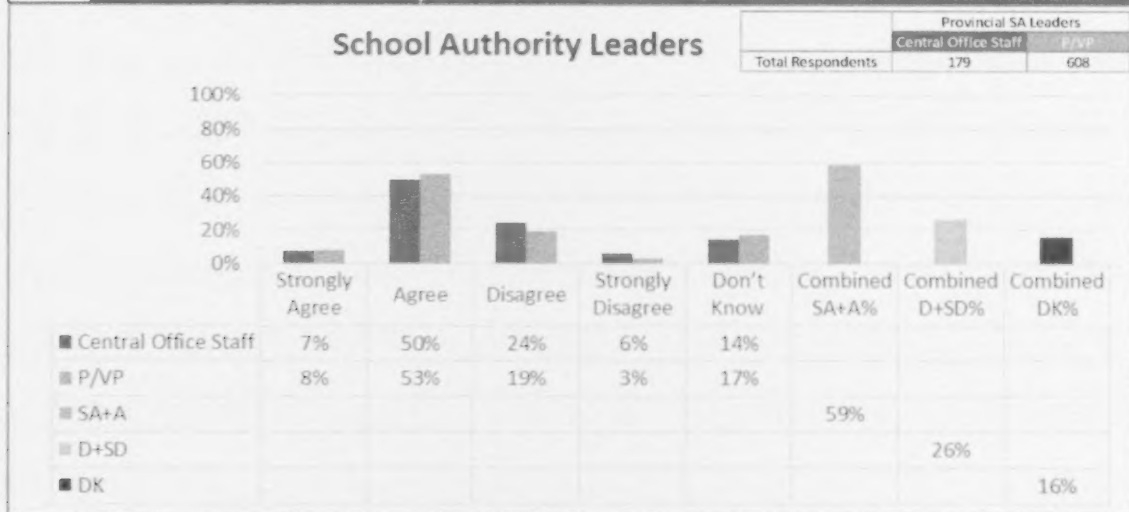




2. Ministry Policies: Administrative Use of Technology

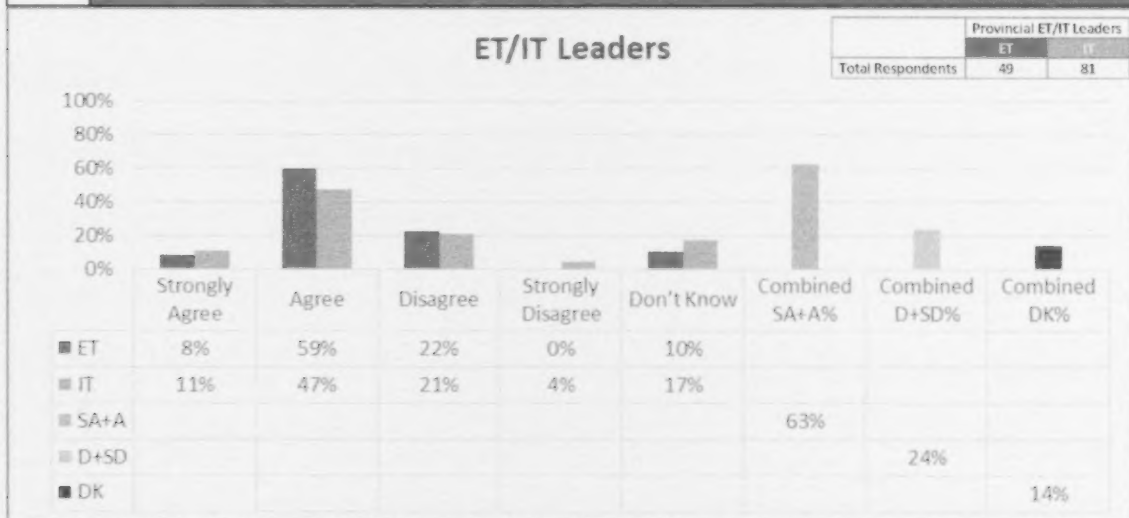
35a

In my opinion, the Ministry has clarity in the policies/procedures that govern administrative uses of technology in all schools



35b

In my opinion, the Ministry has clarity in the policies/procedures that govern administrative uses of technology in all schools

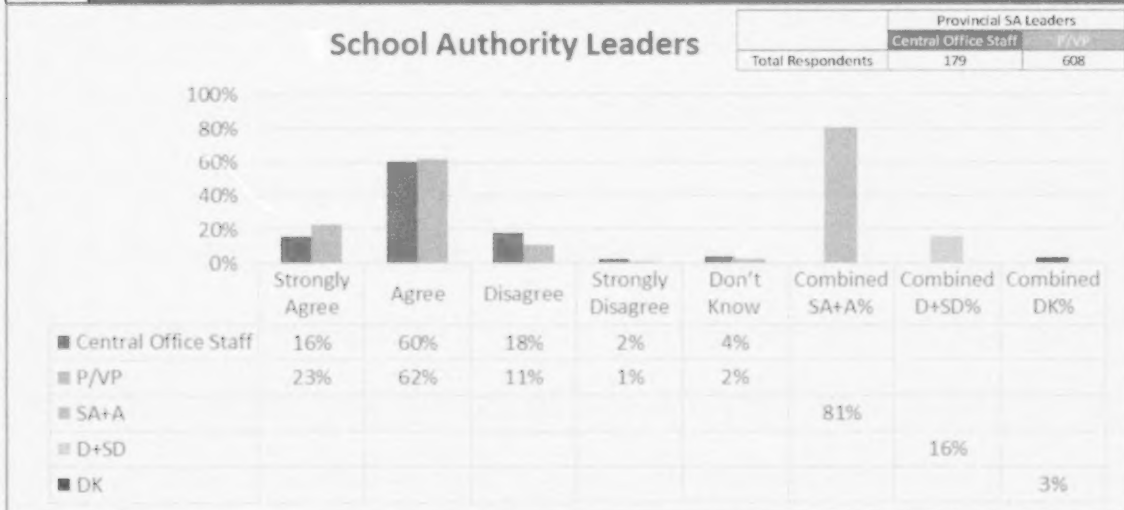




3. School Authority Policies: Educational Use of Technology

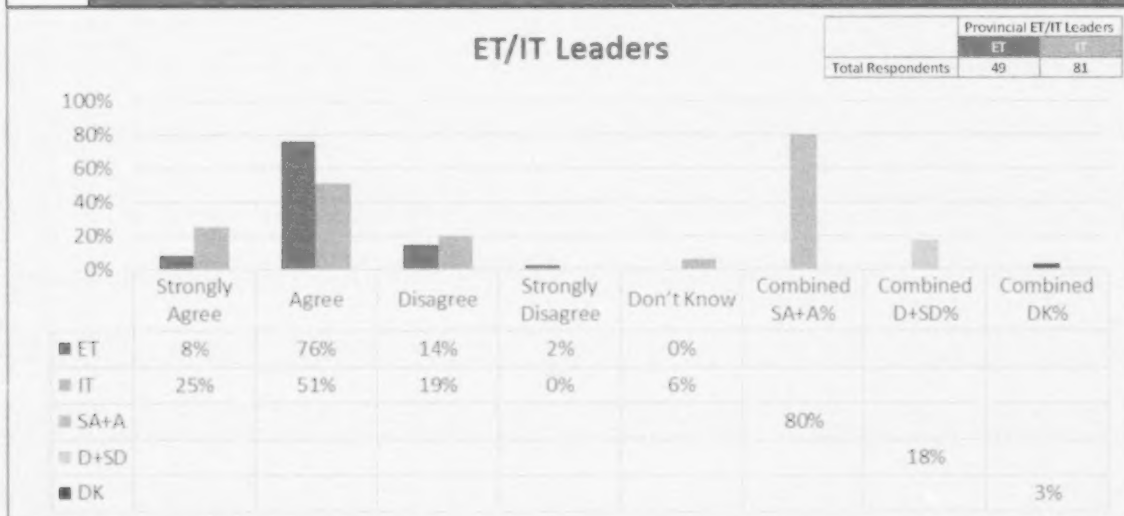
36a

In my opinion, my school authority has clarity in the policies/procedures that govern educational uses of technology in all schools



36b

In my opinion, my school authority has clarity in the policies/procedures that govern educational uses of technology in all schools

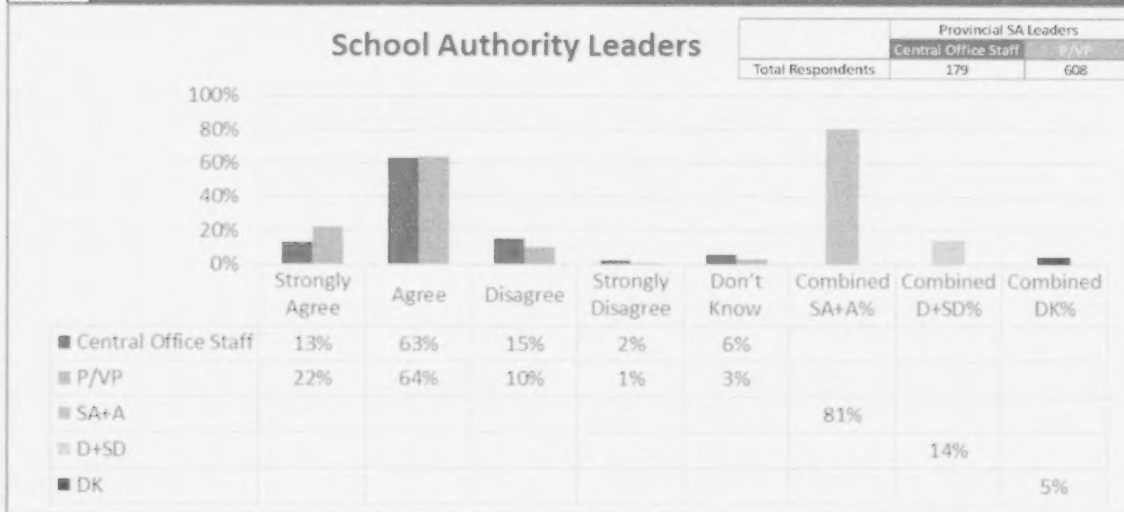




4. School Authority Policies: Administrative Use of Technology

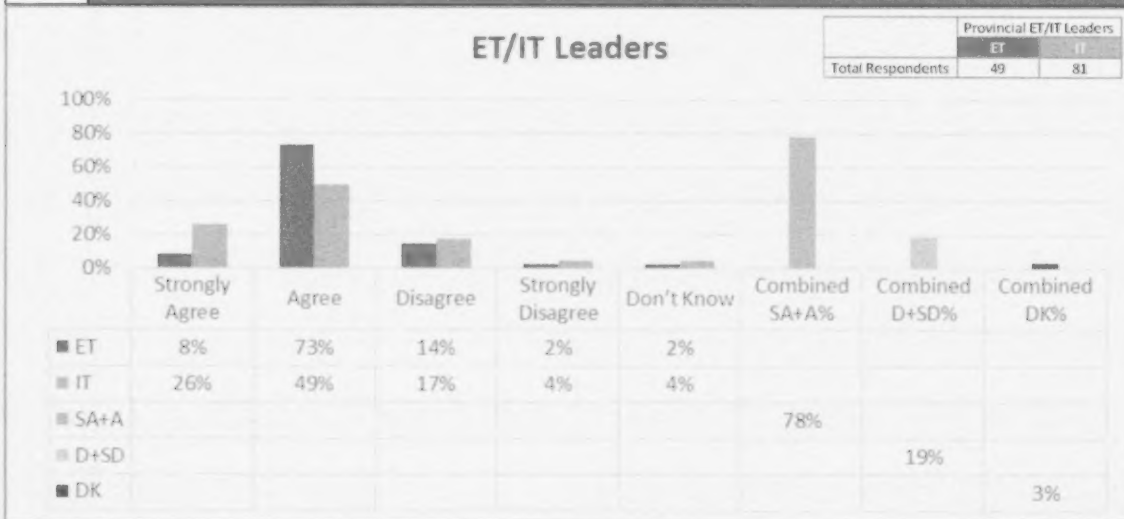
37a

In my opinion, my school authority has clarity in the policies/procedures that govern administrative uses of technology in all schools



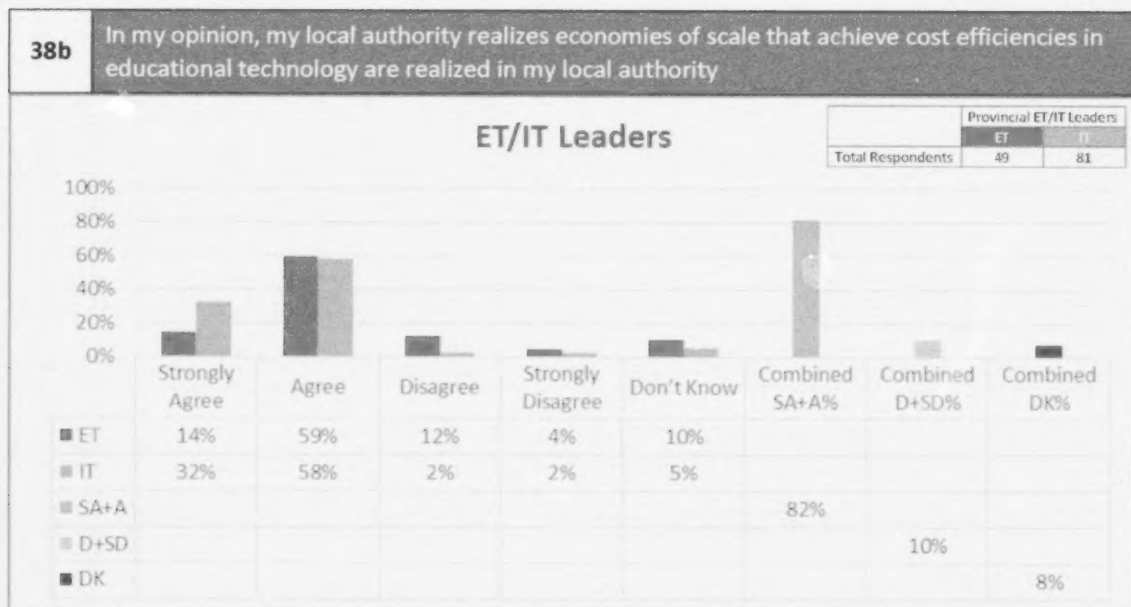
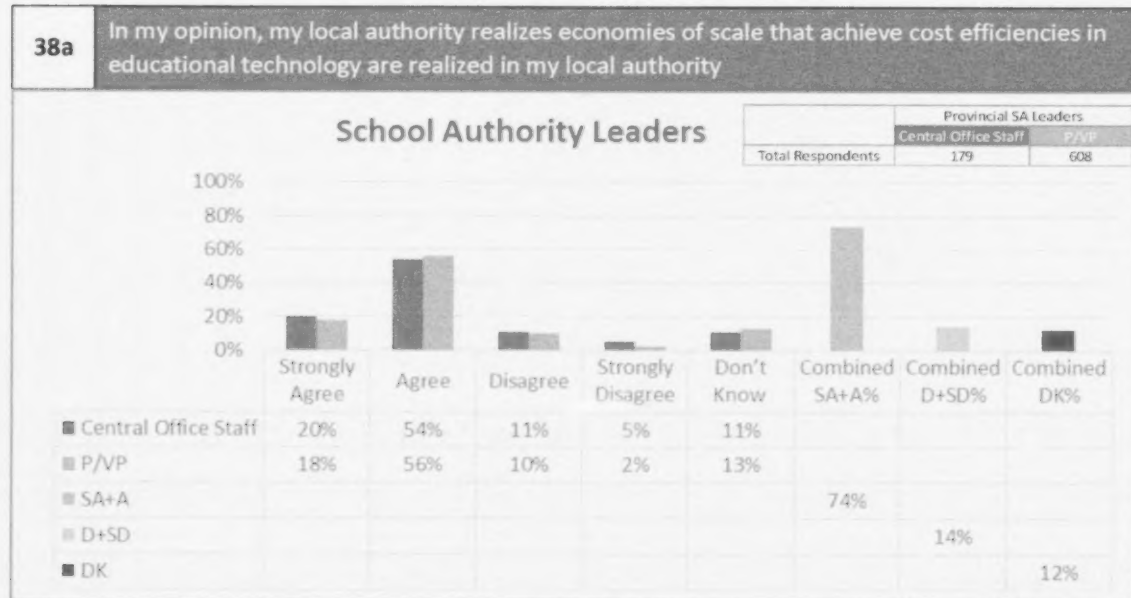
37b

In my opinion, my school authority has clarity in the policies/procedures that govern administrative uses of technology in all schools





5. Economies of Scale/Cost Efficiencies

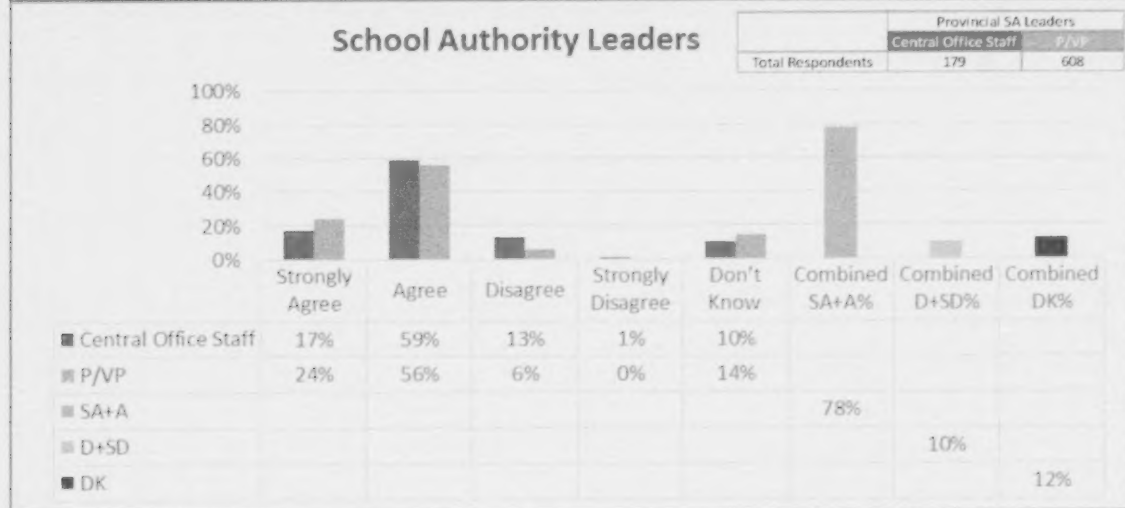




D. Applying the Learning and Technology Policy Framework (LTPF)

39

My school authority uses the Learning and Technology Policy Framework to inform school authority education plans.

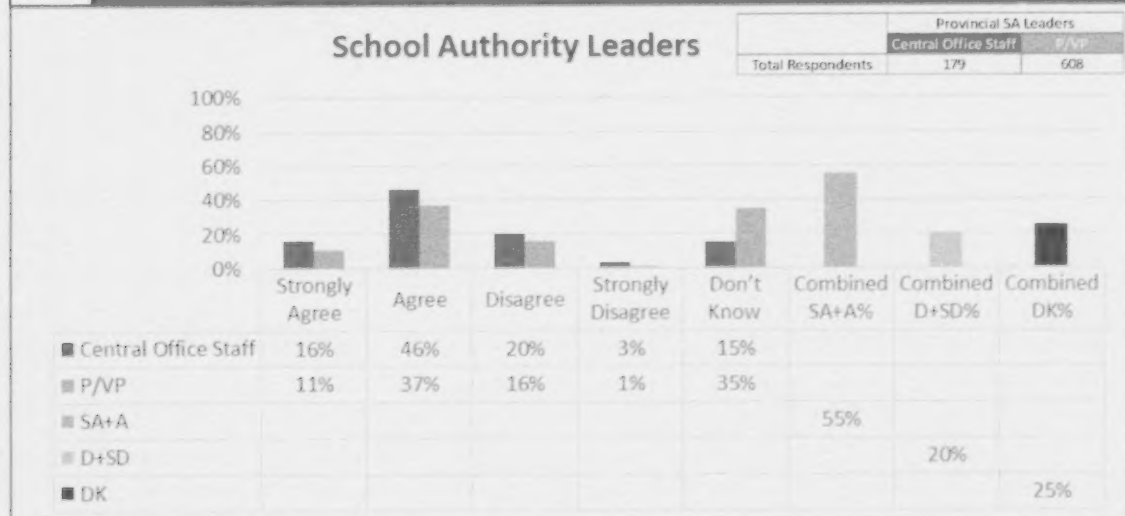


E. Seeking Partnership Opportunities

1. Cross Jurisdictions

40a

My school authority seeks out partnership opportunities to support innovative use of technology with cross-jurisdictions



40b

My school authority seeks out partnership opportunities to support innovative use of technology with cross-jurisdictions

ET/IT Leaders

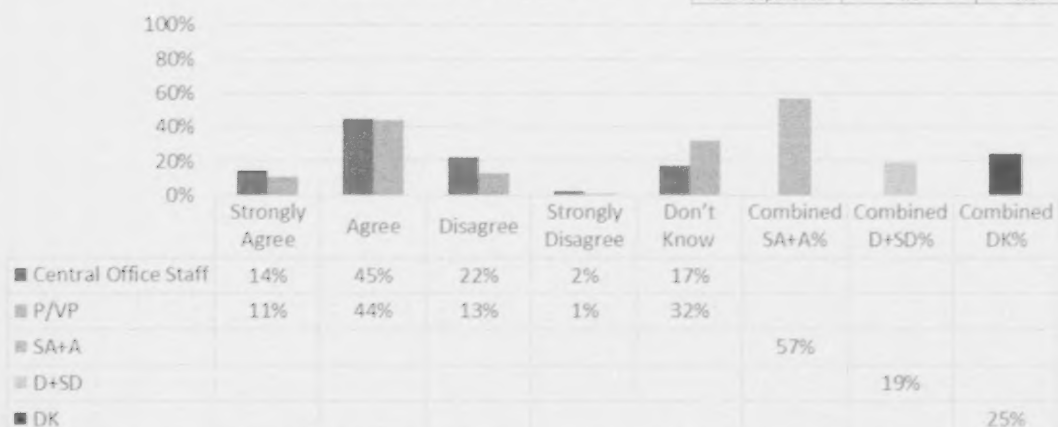


2. Cross-Institutions

41a

My school authority seeks out partnership opportunities to support innovative use of technology with cross-institutions

School Authority Leaders

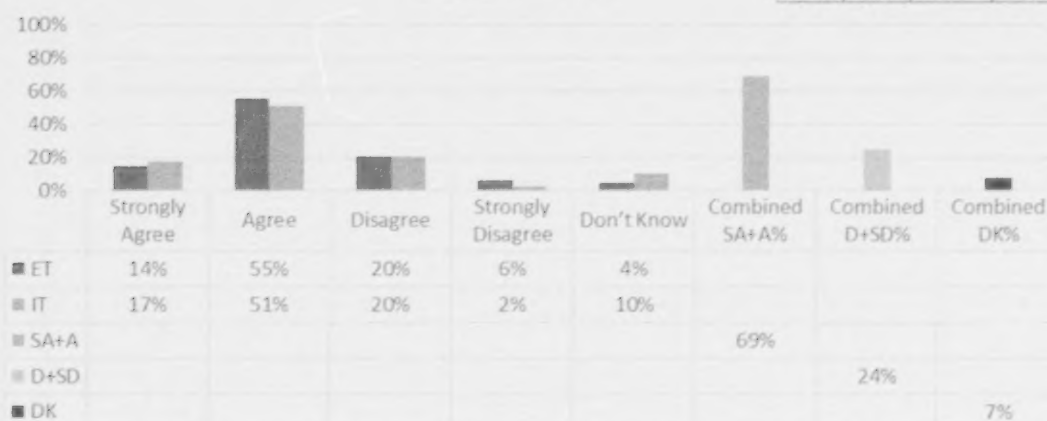




41b

My school authority seeks out partnership opportunities to support innovative use of technology with cross-institutions

ET/IT Leaders

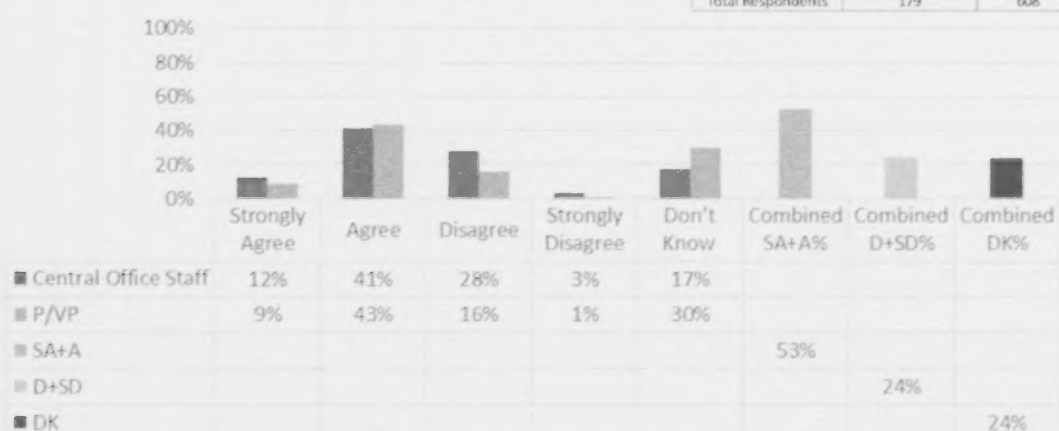


3. With Communities

42a

My school authority seeks out partnership opportunities to support innovative use of technology with community

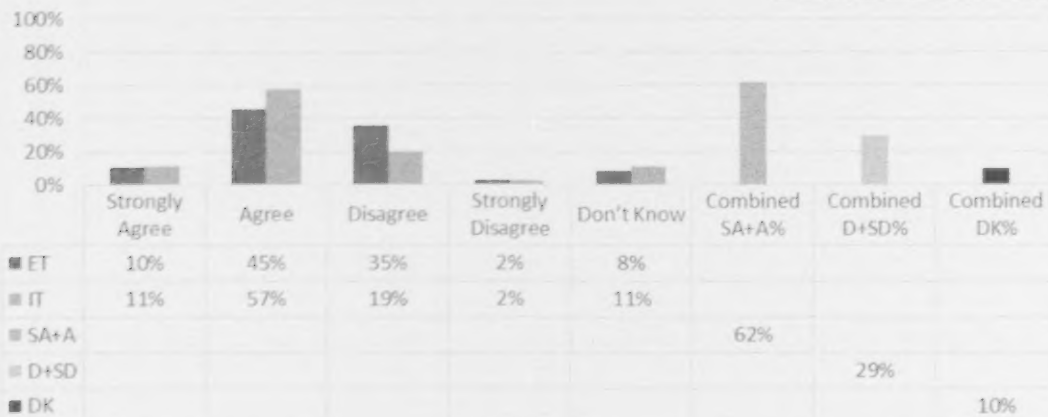
School Authority Leaders



42b

My school authority seeks out partnership opportunities to support innovative use of technology with community

ET/IT Leaders

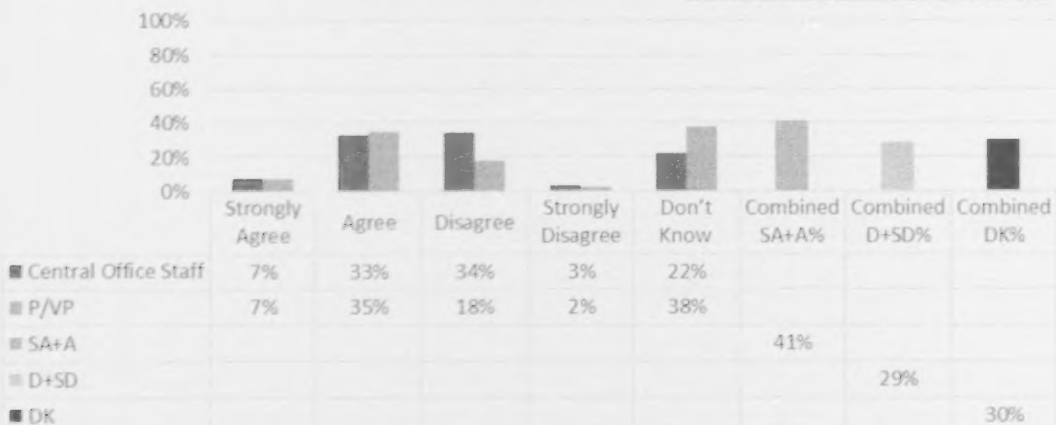


4. With Industry

43a

My school authority seeks out partnership opportunities to support innovative use of technology with industry

School Authority Leaders



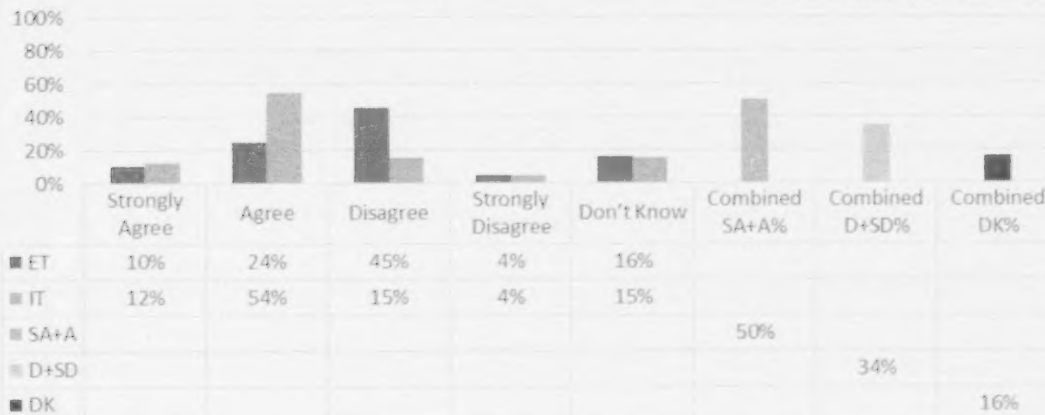


43b

My school authority seeks out partnership opportunities to support innovative use of technology with industry

ET/IT Leaders

	Provincial ET/IT Leaders	
	ET	IT
Total Respondents	49	81

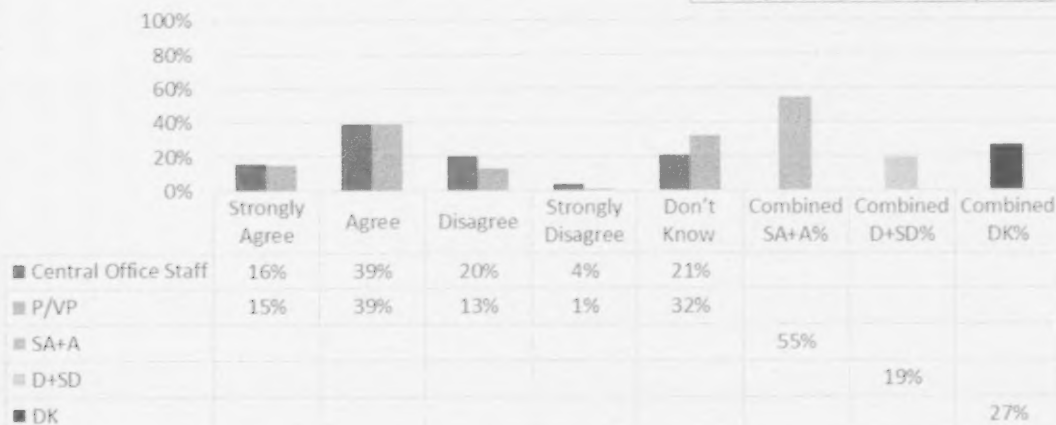


44a

My school authority considers opportunities for community partnerships that expand access to technology-supported learning experiences

School Authority Leaders

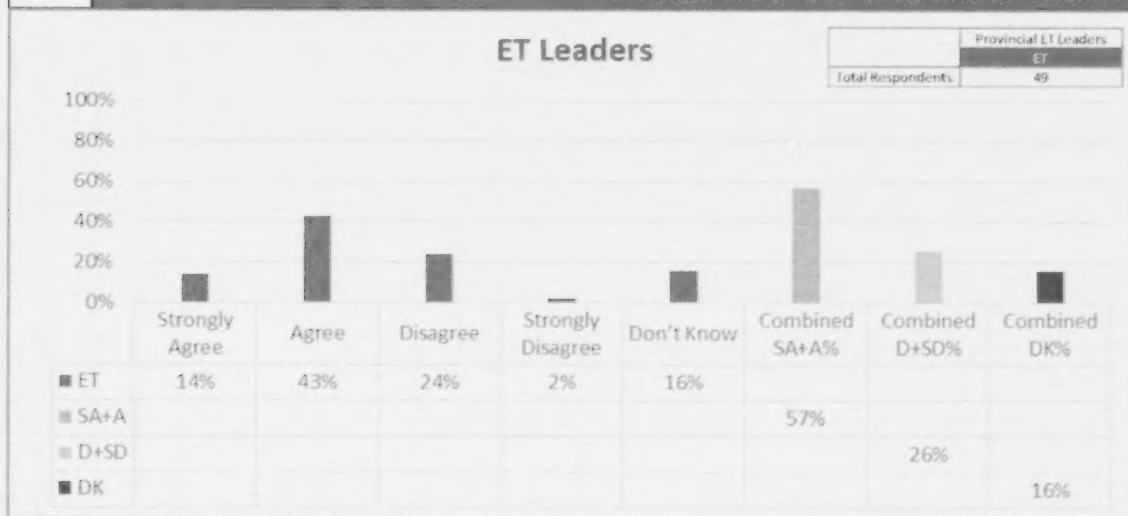
	Provincial SA Leaders	
	Central Office Staff	P/VP
Total Respondents	179	608





44b

My school authority considers opportunities for community partnerships that expand access to technology-supported learning experiences

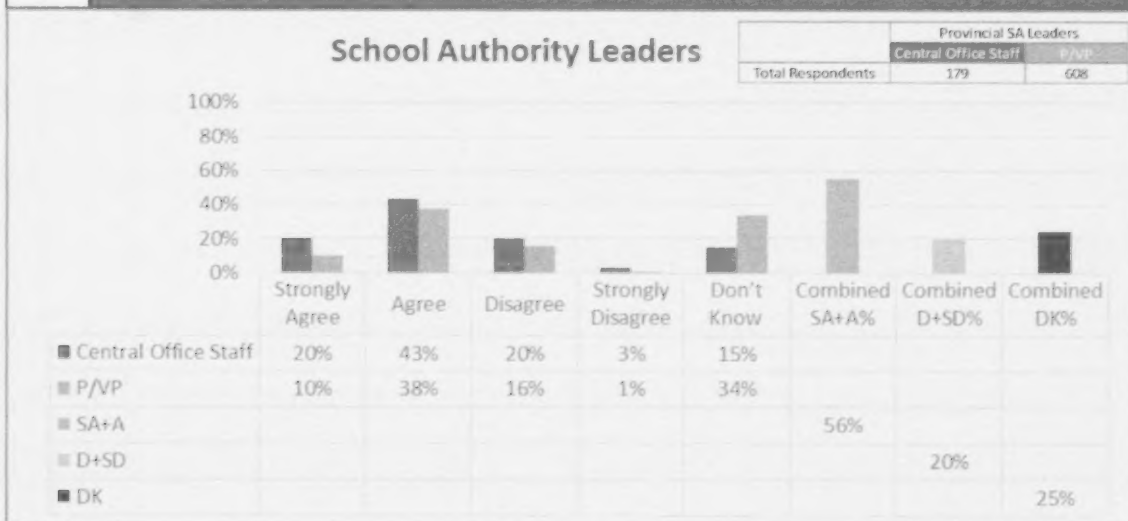


F. Participating in Partnerships

a. Cross-Jurisdiction

45a

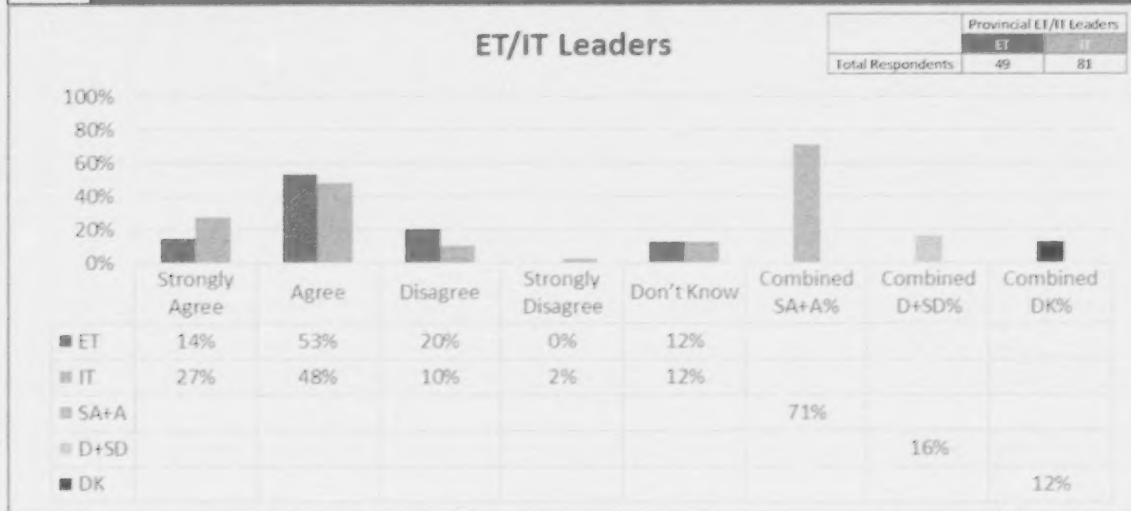
My school authority participates in partnership opportunities to support innovative use of technology with cross-jurisdictions





45b

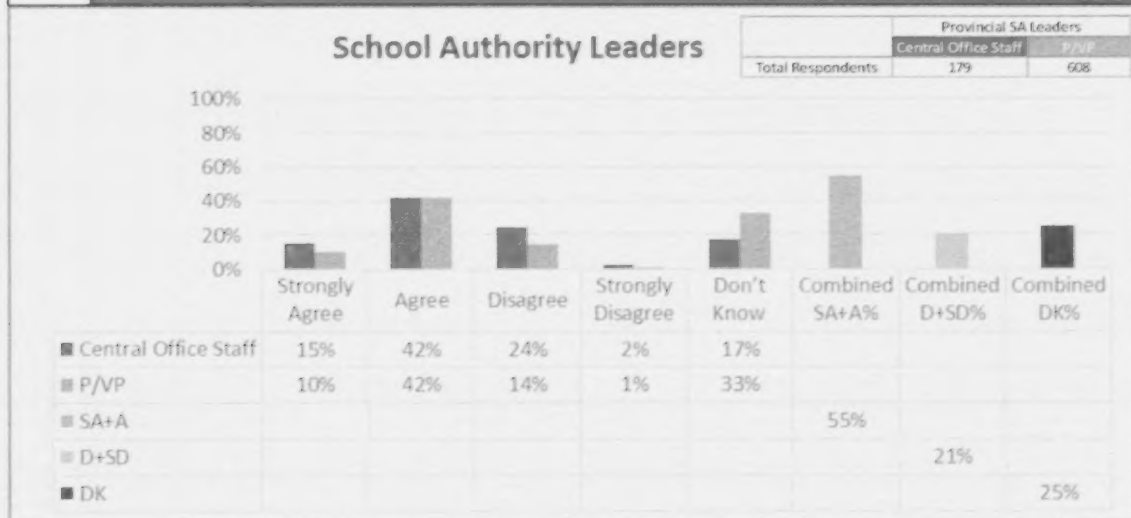
My school authority participates in partnership opportunities to support innovative use of technology with cross-jurisdictions



b. Cross-Institution

46a

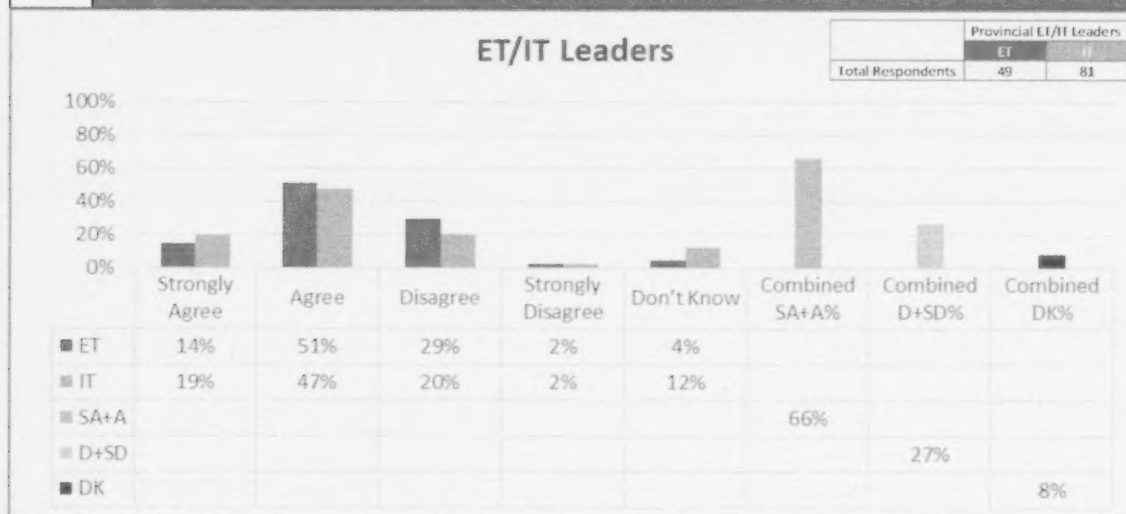
My school authority participates in partnership opportunities to support innovative use of technology with cross-institutions





46b

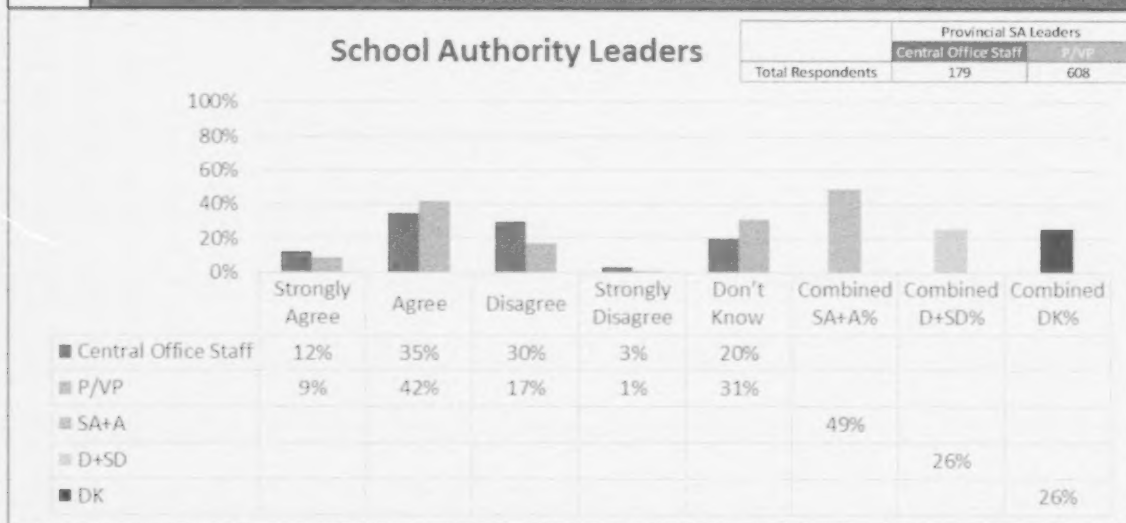
My school authority participates in partnership opportunities to support innovative use of technology with cross-institutions



c. With Communities

47a

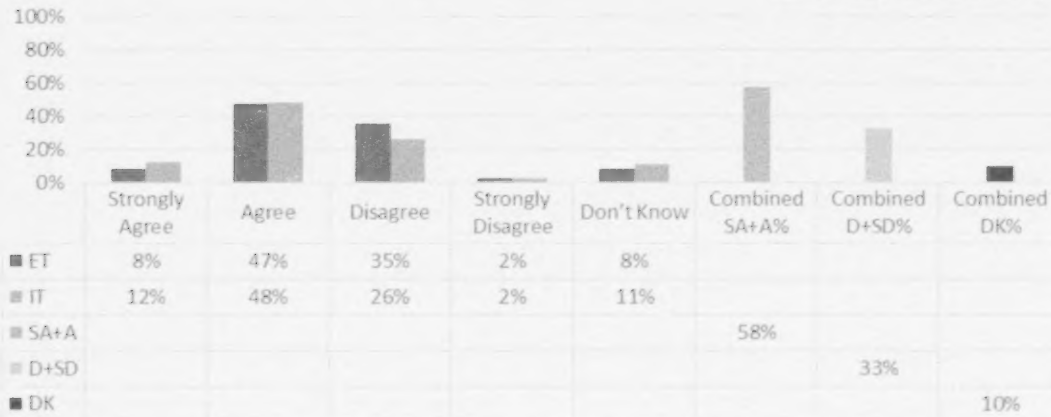
My school authority participates in partnership opportunities to support innovative use of technology with community



47b My school authority participates in partnership opportunities to support innovative use of technology with community

ET/IT Leaders

Total Respondents	Provincial ET/IT Leaders	
	ET	IT
	49	81

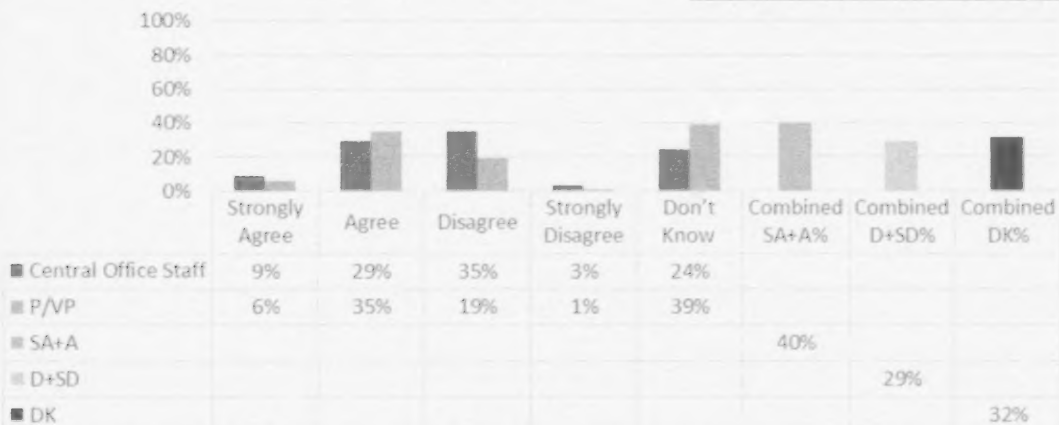


4. With Industry

48a My school authority participates in partnership opportunities to support innovative use of technology with industry

School Authority Leaders

Total Respondents	Provincial SA Leaders	
	Central Office Staff	P/VP
	179	608



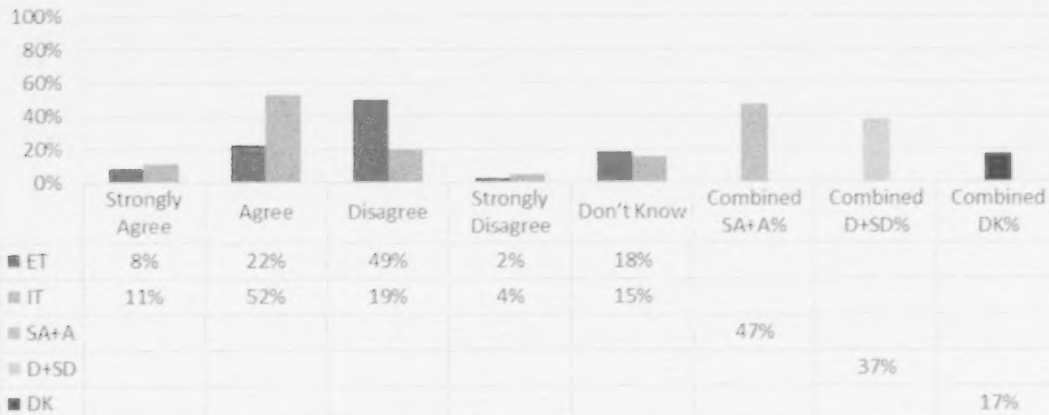


48b

My school authority participates in partnership opportunities to support innovative use of technology with industry

ET/IT Leaders

Total Respondents	Provincial ET/IT Leaders	
	ET	IT
	49	81



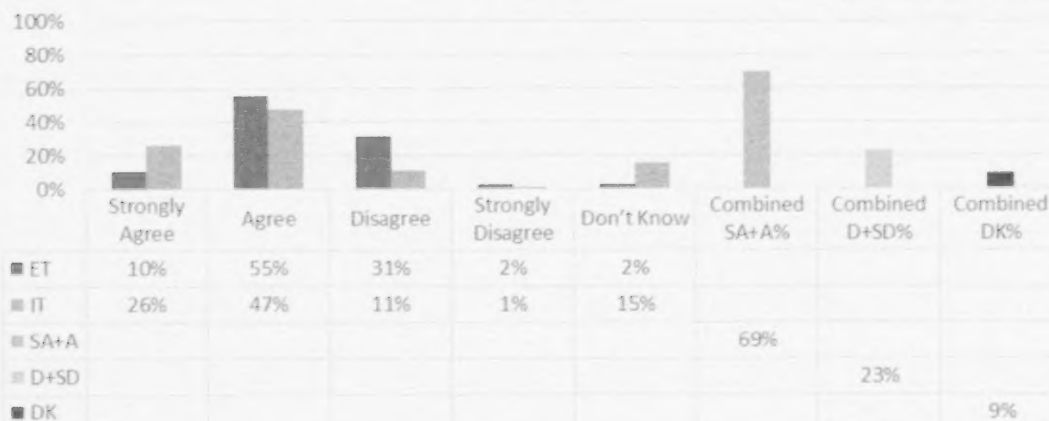
G. Assessing Progress in the Use of Technology

49a

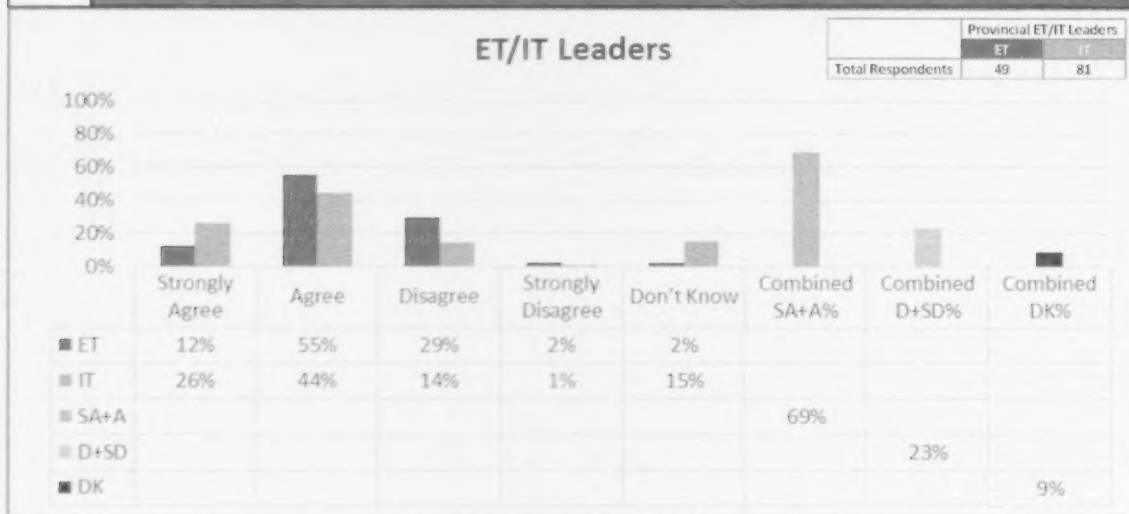
My school authority regularly assesses progress in the use of technology to support student learning

ET/IT Leaders

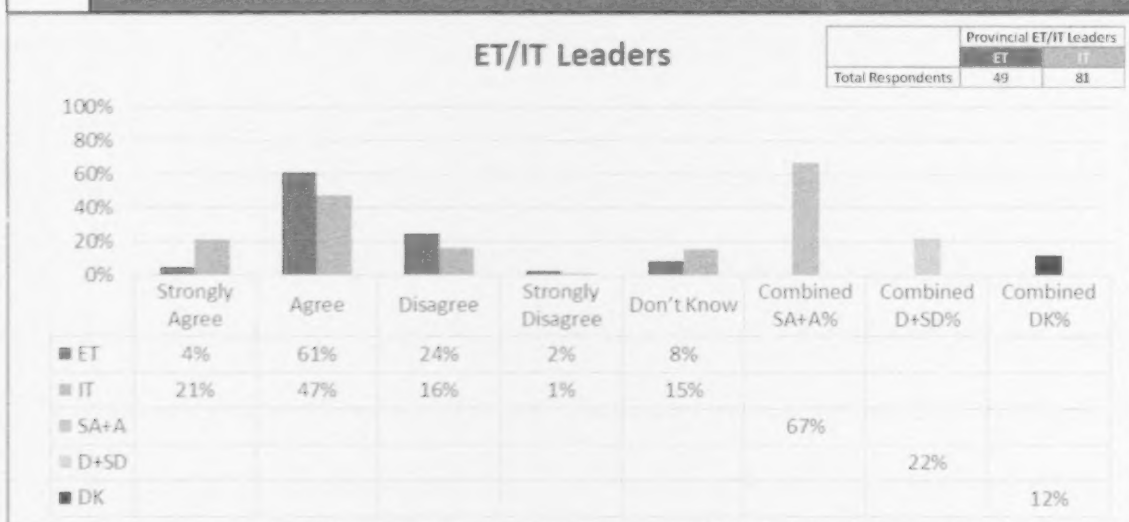
Total Respondents	Provincial ET/IT Leaders	
	ET	IT
	49	81



49b My school authority regularly assesses progress in the use of technology to support teaching



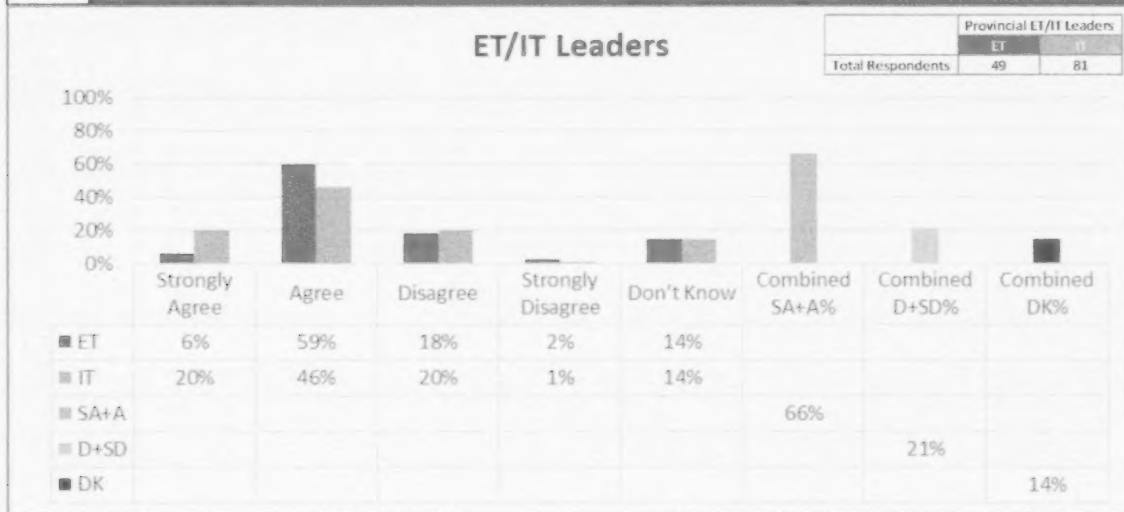
49c My school authority regularly assesses progress in the use of technology to support educational administration





49d

My school authority regularly assesses progress in the use of technology to support business administration

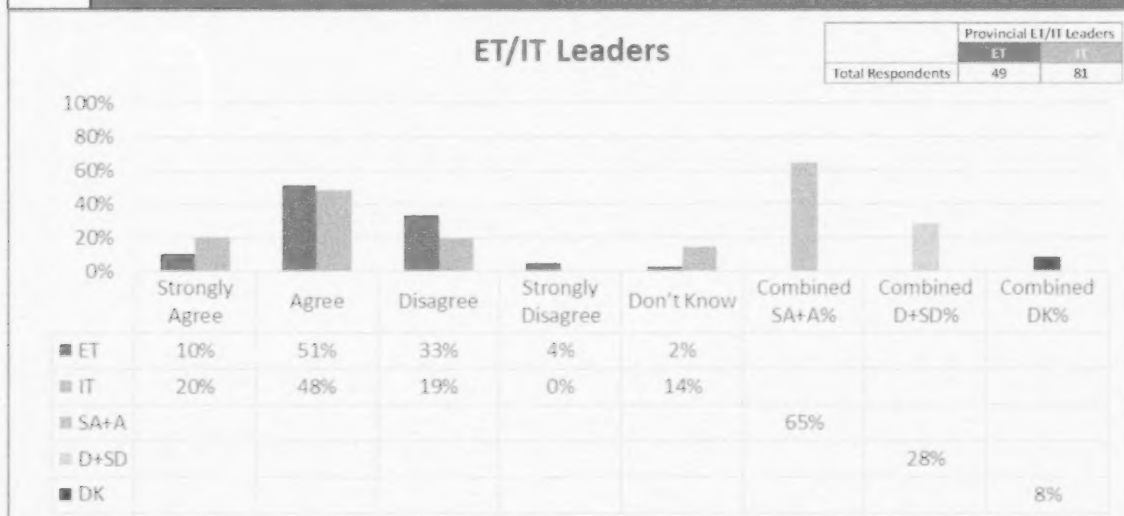


H. School Authority Technology Plans

1. For Student-Centred Learning

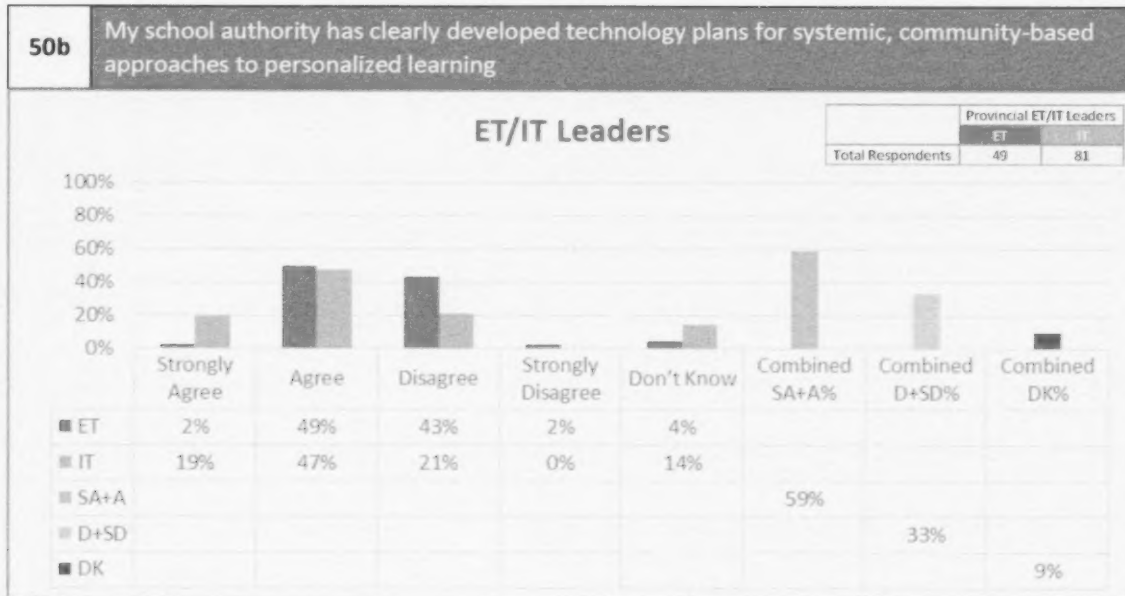
50a

My school authority has clearly developed technology plans for systemic, community-based approaches to student-centred learning

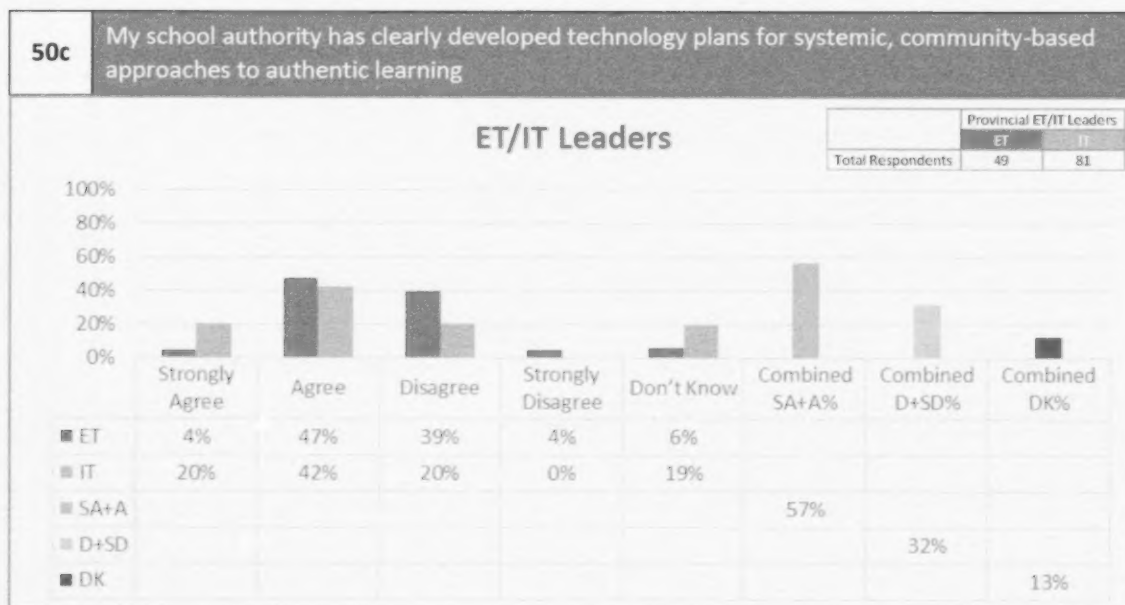




2. For Personalized Learning



3. For Authentic Learning

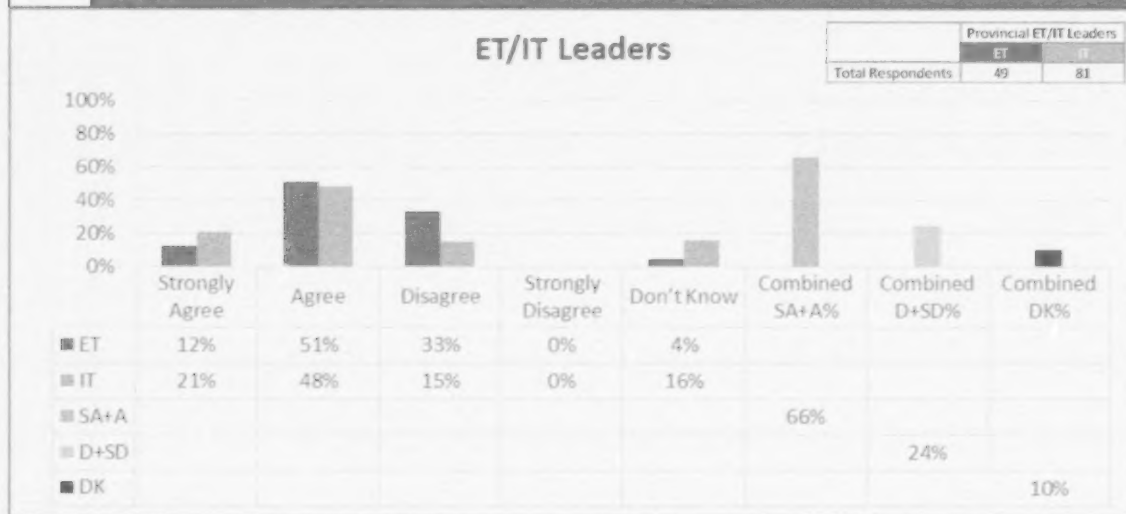




I. Updating School Authority Technology Plans

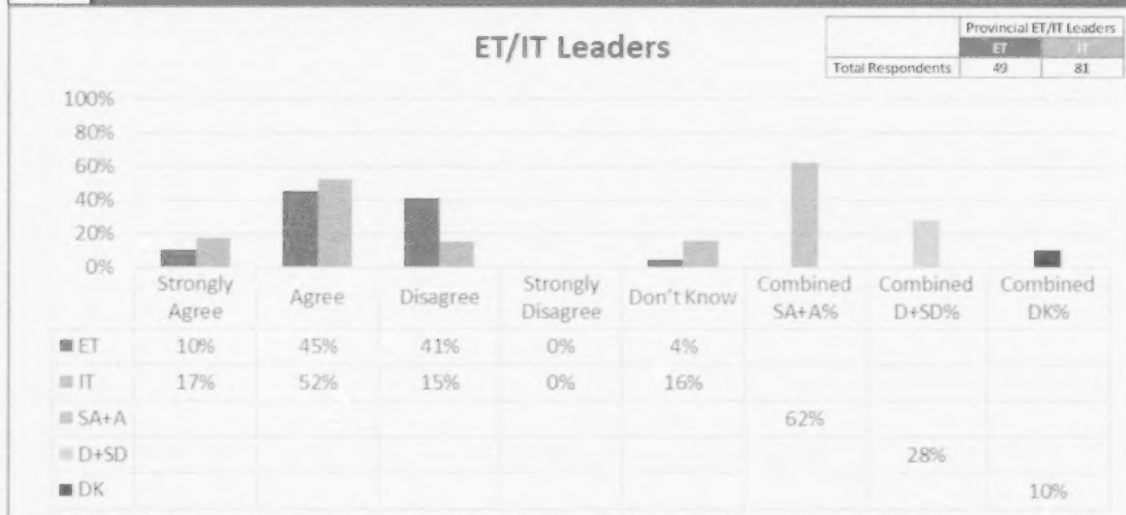
51a

My school authority updates their technology plans for systemic, community-based approaches to student-centred learning



51b

My school authority updates their technology plans for systemic, community-based approaches to personalized learning

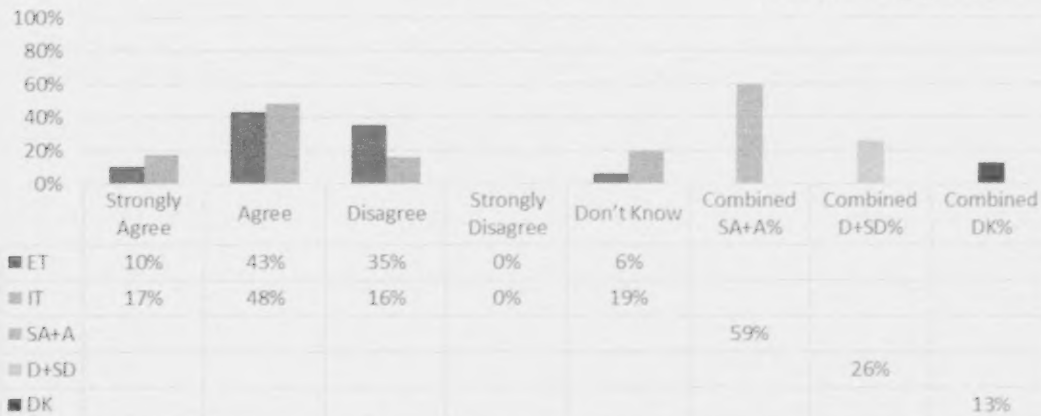




51c

My school authority updates their technology plans for systemic, community-based approaches to authentic learning

ET/IT Leaders

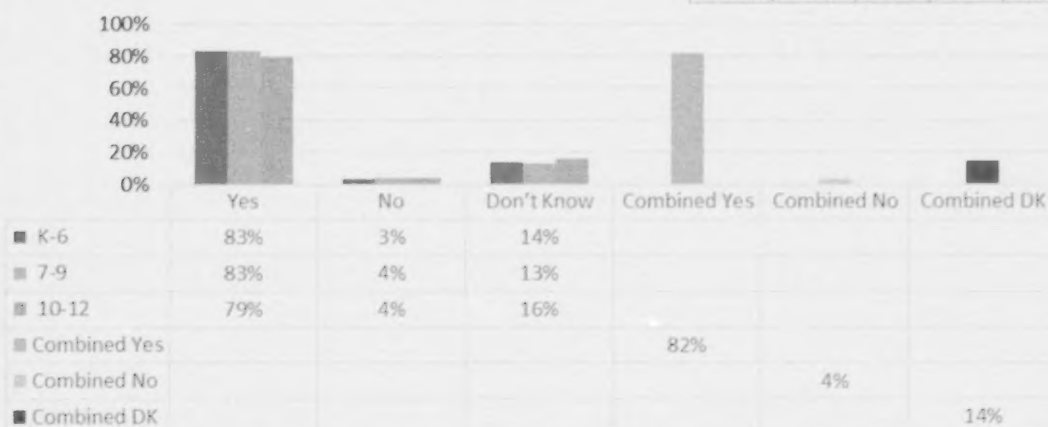


J. School Authority Policies for Security and Privacy

52

My school authority has clear policies in place for security/privacy protection

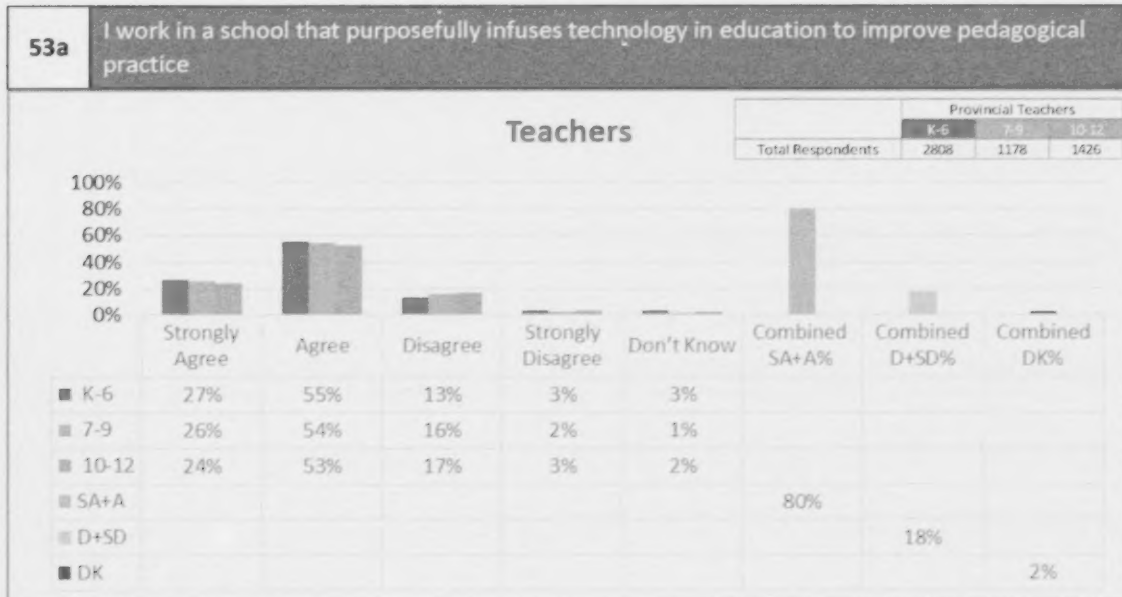
Teachers



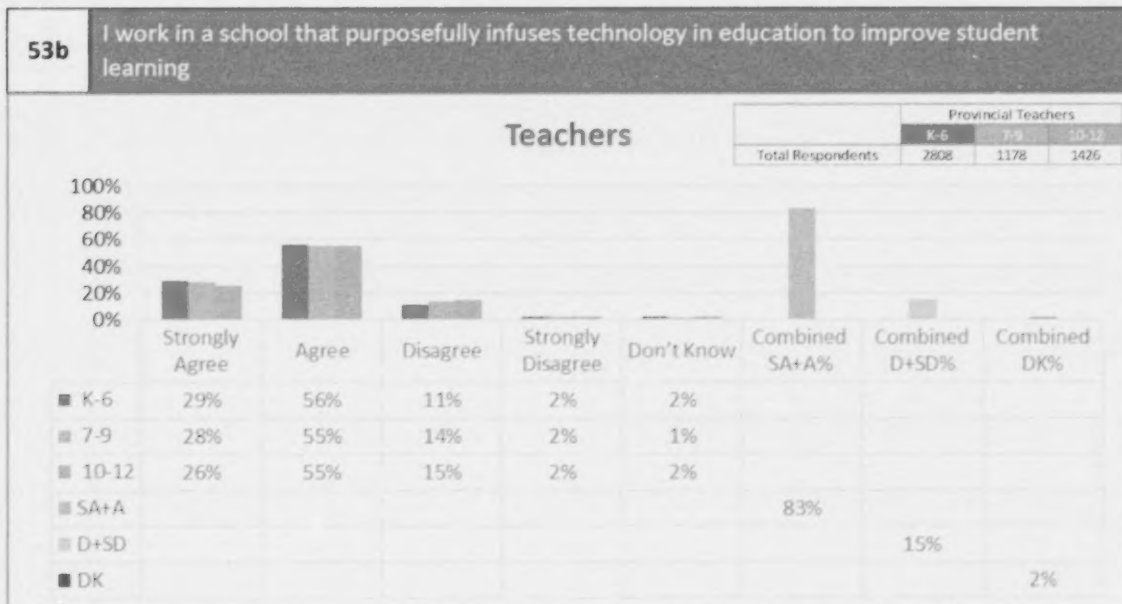


K. School Use of Technology:

1. Purposefully Infuses Technology in Education to Improve Pedagogical Practice

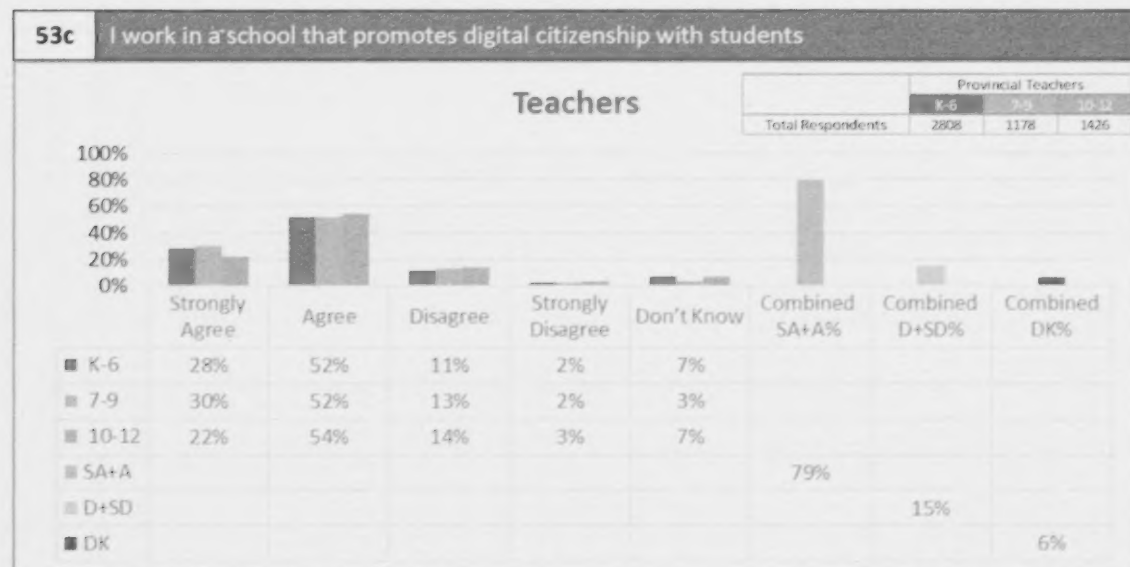


2. Purposefully Infuses Technology in Education to Improve Student Learning

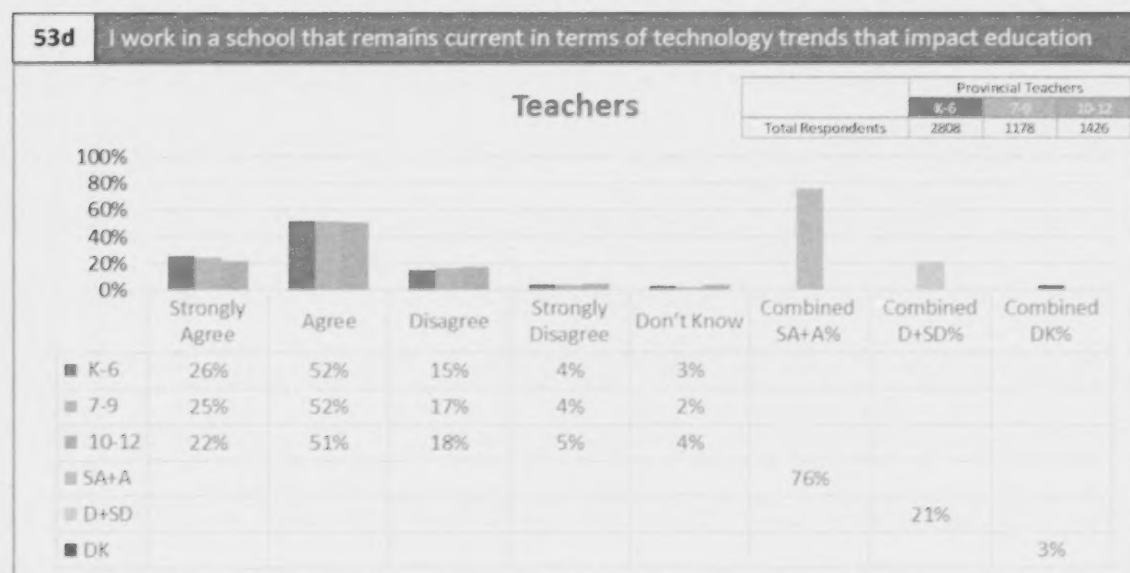




3. Promotes Digital Citizenship with Students



4. Remains Current in Technology Trends that Impact Educations

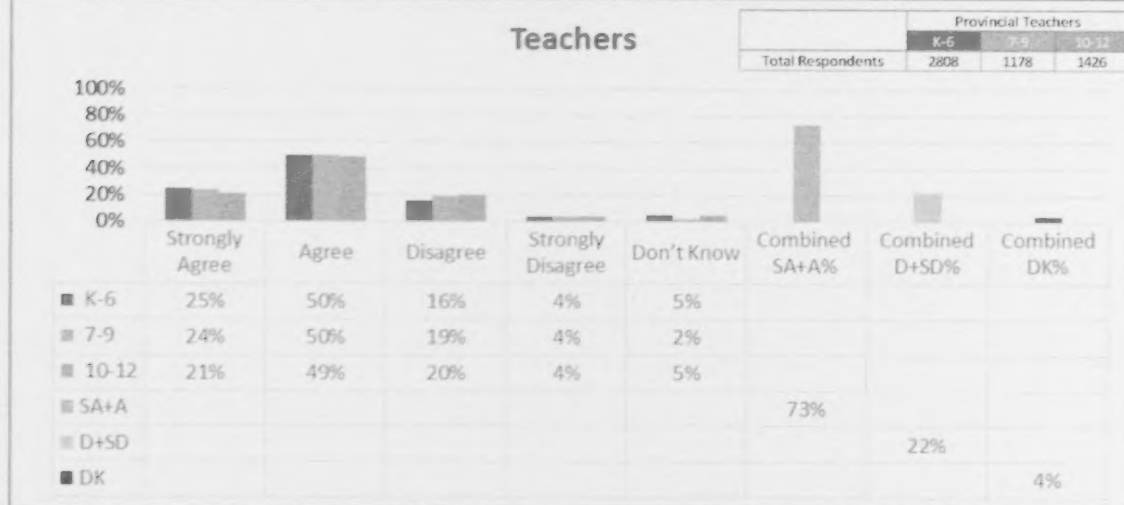




5. Remains Current in Exploring Technology Opportunities to Support Digital Culture

53e

I work in a school that remains current in terms of exploring technology opportunities to support the evolving digital culture





L. To What Degree is Technology Being Integrated Into:

1. English/Language Arts

Note: Only the responses from the survey responding teachers that indicated they teach English/Language Arts, are represented in the following pie charts

English/Language Arts	
Grade K-6 a. Of the 2802 K-6 teachers that responded to the overall survey, 2468 teachers responded to this question, as they teach English/Language Arts b. 340 K-6 survey responding teachers indicated they do not teach English/Language Arts, therefore they are not represented in the chart	Grade: K - 6 » Very Little » Moderately » A great deal
Grade: 7-9 a. Of the 1178 7-9 teachers that responded to the overall survey, 632 teachers responded to this question, as they teach English/Language Arts b. 546 7-9 survey responding teachers indicated they do not teach English/Language Arts, therefore they are not represented in the chart	Grade: 7 - 9 » Very little » Moderately » A great deal
Grade 10-12 a. Of the 1426 10-12 teachers that responded to the overall survey, 513 teachers responded to this question, as they teach English/Language Arts b. 913 10-12 survey responding teachers indicated they do not teach English/Language Arts, therefore they are not represented in the chart	Grade: 10 - 12 » Very little » Moderately » A great deal



2. Mathematics

Note: Only the responses from the survey responding teachers that indicated they teach Mathematics, are represented in the following pie charts

Mathematics	
Grade K-6 a. Of the 2802 K-6 teachers that responded to the overall survey, 2429 teachers responded to this question, as they teach Math b. 379 K-6 survey responding teachers indicated they do not teach Math, therefore they are not represented in the chart	Grade: K - 6 26% 21% 53% = Very little = Moderately = A great deal
Grade: 7-9 a. Of the 1178 7-9 teachers that responded to the overall survey, 552 teachers responded to this question, as they teach Math b. 626 7-9 survey responding teachers indicated they do not teach Math, therefore they are not represented in the chart	Grade: 7 - 9 27% 26% 47% = Very little = Moderately = A great deal
Grade 10-12 a. Of the 1426 10-12 teachers that responded to the overall survey, 508 teachers responded to this question, as they teach Math b. 918 10-12 survey responding teachers indicated they do not teach Math, therefore they are not represented in the chart	Grade: 10 - 12 28% 22% 50% = Very little = Moderately = A great deal



3. Science

Note: Only the responses from the survey responding teachers that indicated they teach Science, are represented in the following pie charts

Science	
Grade K-6 a. Of the 2802 K-6 teachers that responded to the overall survey, 2319 teachers responded to this question, as they teach Science b. 489 K-6 survey responding teachers indicated they do not teach Science, therefore they are not represented in the chart	Grade: K - 6 27% 22% 51% Very little Moderately A great deal
Grade: 7-9 a. Of the 1178 7-9 teachers that responded to the overall survey, 526 teachers responded to this question, as they teach Science b. 652 7-9 survey responding teachers indicated they do not teach Science, therefore they are not represented in the chart	Grade: 7 - 9 10% 45% 45% Very little Moderately A great deal
Grade 10-12 a. Of the 1426 10-12 teachers that responded to the overall survey, 534 teachers responded to this question, as they teach Science b. 892 10-12 survey responding teachers indicated they do not teach Science, therefore they are not represented in the chart	Grade: 10 - 12 9% 41% 50% Very little Moderately A great deal



4. Social Studies

Note: Only the responses from the survey responding teachers that indicated they teach Social Studies, are represented in the following pie charts

Social Studies	
Grade K-6 a. Of the 2802 K-6 teachers that responded to the overall survey, 2345 teachers responded to this question, as they teach Social Studies b. 463 K-6 survey responding teachers indicated they do not teach Social Studies, therefore they are not represented in the chart	Grade: K - 6 Very little Moderately A great deal
Grade: 7-9 a. Of the 1178 7-9 teachers that responded to the overall survey, 580 teachers responded to this question, as they teach Social Studies b. 598 7-9 survey responding teachers indicated they do not teach Social Studies, therefore they are not represented in the chart	Grade: 7 - 9 Very little Moderately A great deal
Grade 10-12 a. Of the 1426 10-12 teachers that responded to the overall survey, 480 teachers responded to this question, as they teach Social Studies b. 946 10-12 survey responding teachers indicated they do not teach Social Studies, therefore they are not represented in the chart	Grade: 10 - 12 Very little Moderately A great deal



5. Cross Curricular

Note: Only the responses from the survey responding teachers that indicated they teach Cross Curricular, are represented in the following pie charts

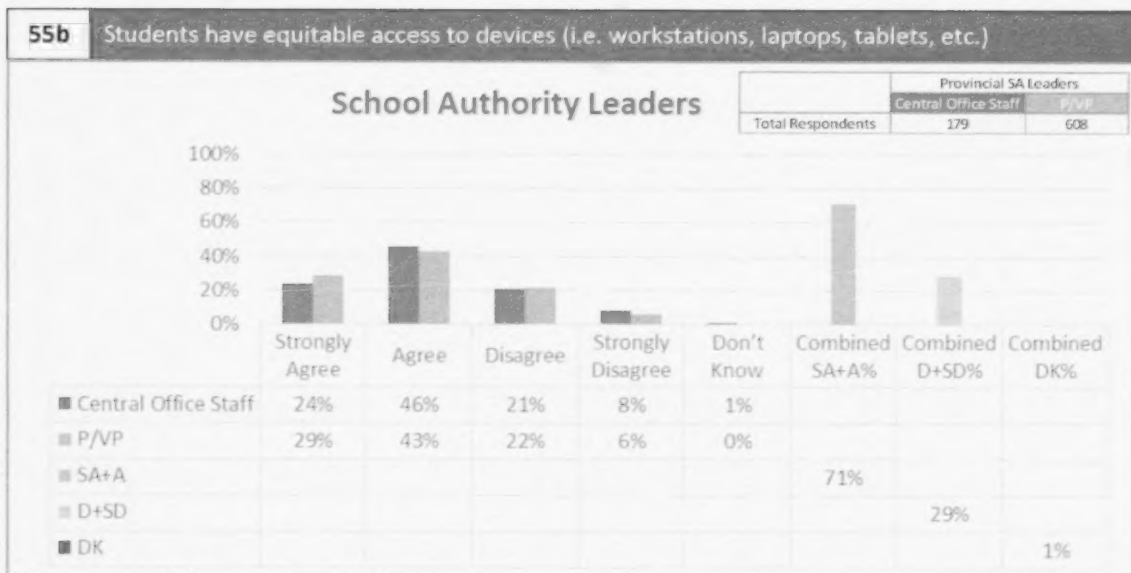
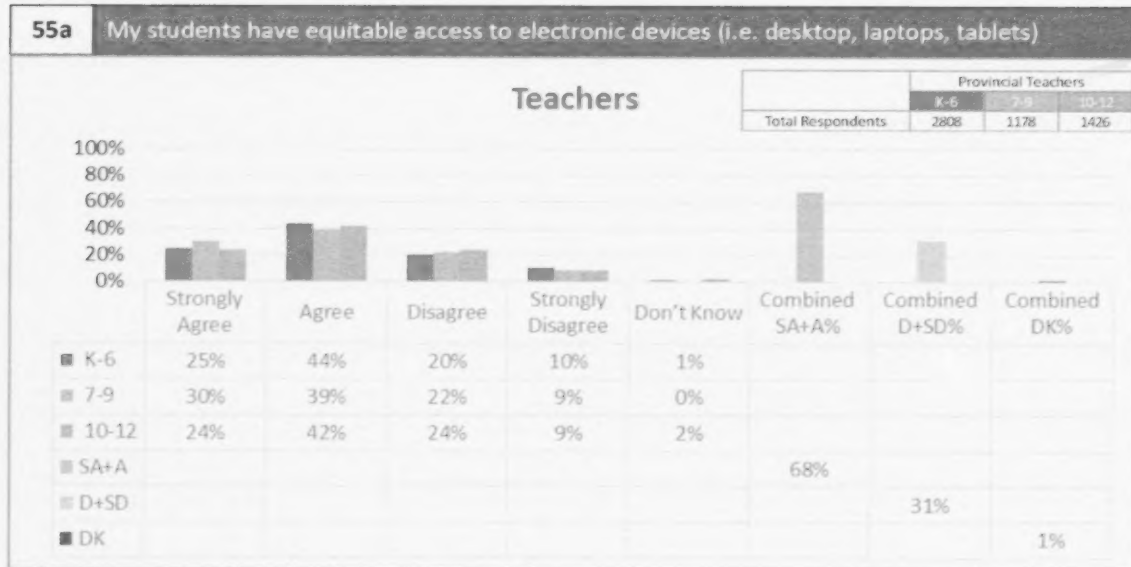
Cross Curricular	
Grade K-6 a. Of the 2802 K-6 teachers that responded to the overall survey, 2492 teachers responded to this question, as they teach cross curricular b. 316 K-6 survey responding teachers indicated they do not teach cross curricular, therefore they are not represented in the chart	Grade: K - 6 • Very Little • Moderately • A great deal
Grade: 7-9 a. Of the 1178 7-9 teachers that responded to the overall survey, 709 teachers responded to this question, as they teach cross curricular b. 469 7-9 survey responding teachers indicated they do not teach cross curricular, therefore they are not represented in the chart	Grade: 7 - 9 • Very little • Moderately • A great deal
Grade 10-12 a. Of the 1426 10-12 teachers that responded to the overall survey, 657 teachers responded to this question, as they teach cross curricular b. 769 10-12 survey responding teachers indicated they do not teach cross curricular, therefore they are not represented in the chart	Grade: 10 - 12 • Very little • Moderately • A great deal



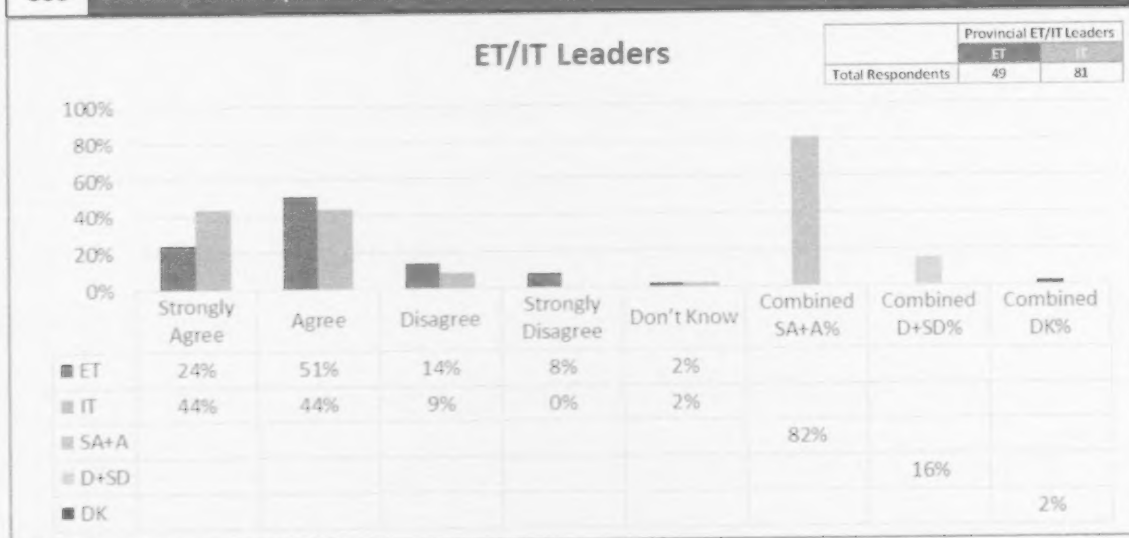
Policy Direction 5 Online Survey Results

A. Student Access at School:

1. Equitable Access to Devices, i.e. workstations, laptops tablets, etc.



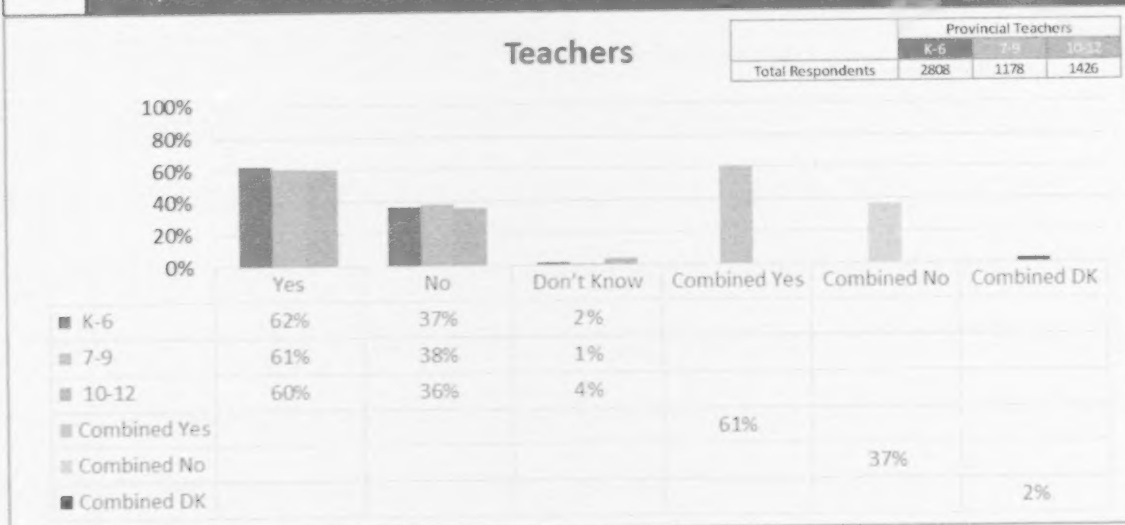
55c Students have equitable access to devices (i.e. workstations, laptops, tablets, etc.)



2. In-School Access to Computers

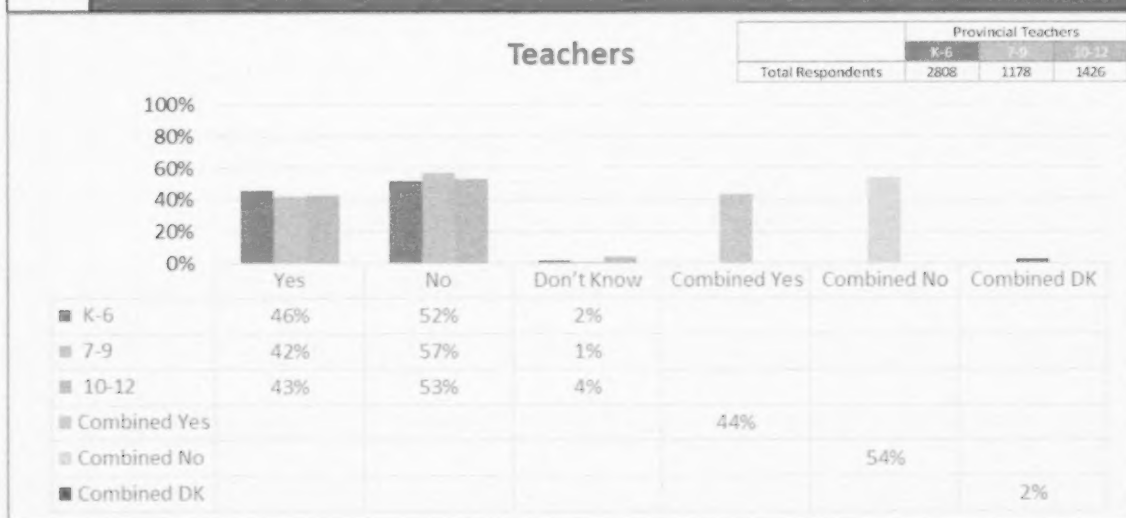
56a

Access to computers for your students is sufficient in terms of Accessibility (where they need them)

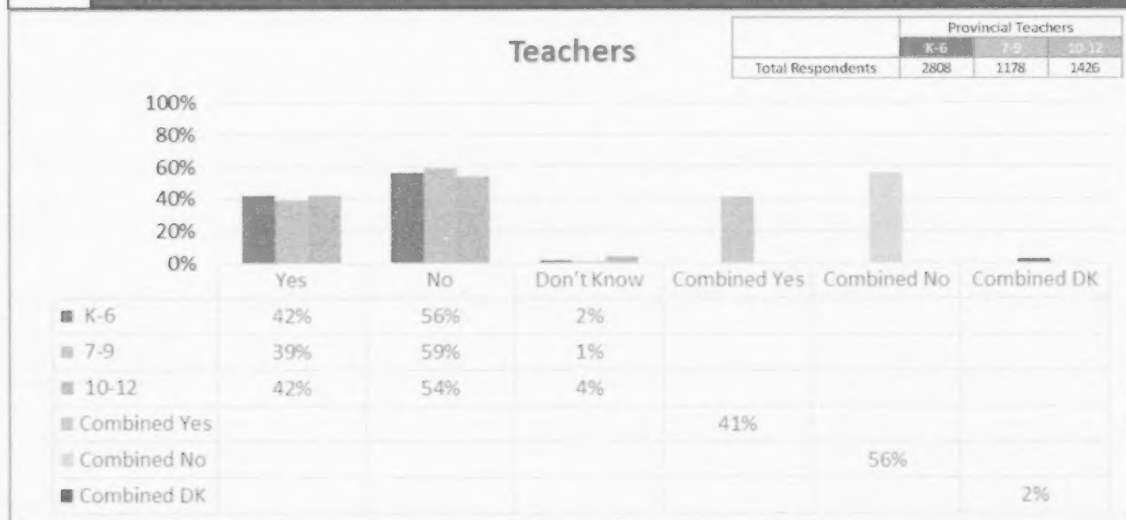




56b Access to computers for your students is sufficient in terms of Quantity of computers



56c Access to computers for your students is sufficient in terms of Availability of computers (when they need them)



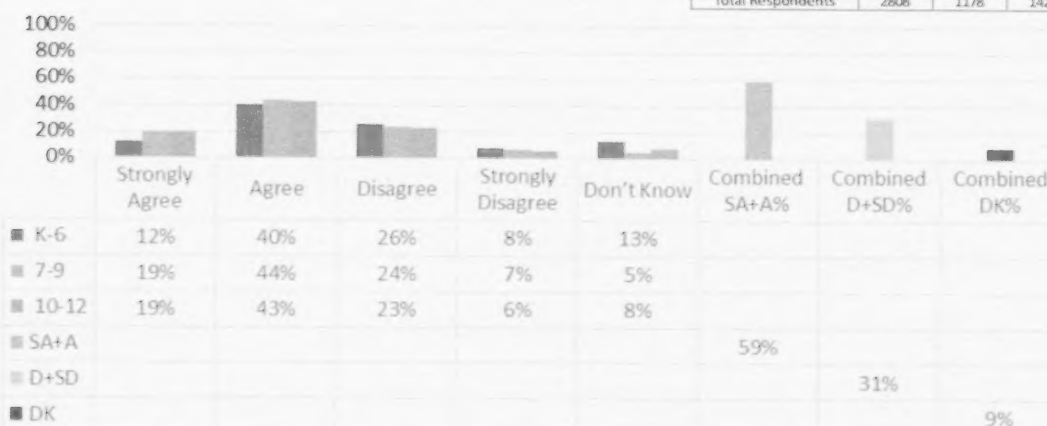


3. Digital Learning Environments

57a

My students have equitable access to digital learning environments. DLEs are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond

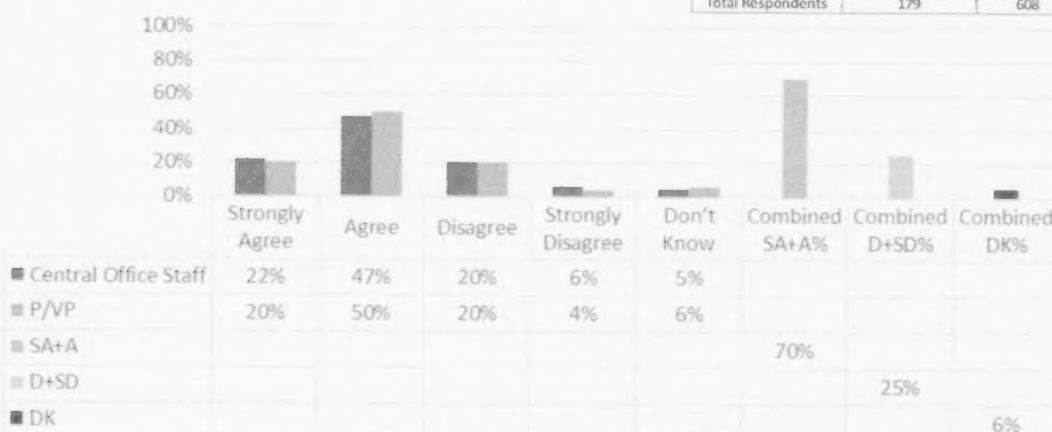
Teachers



57b

Students have equitable access to digital learning environments. DLE are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond

School Authority Leaders

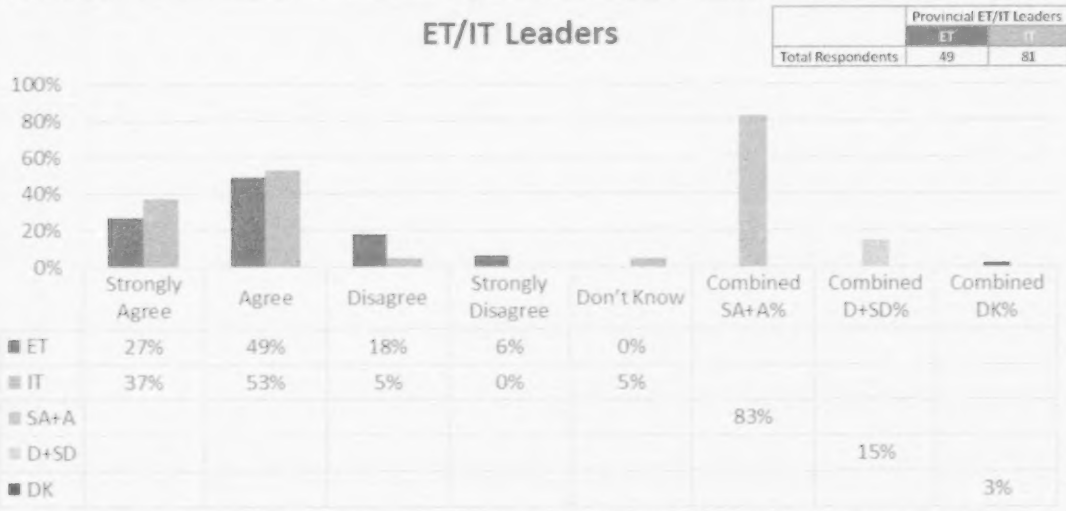




57c

Students have equitable access to digital learning environments. DLE are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond

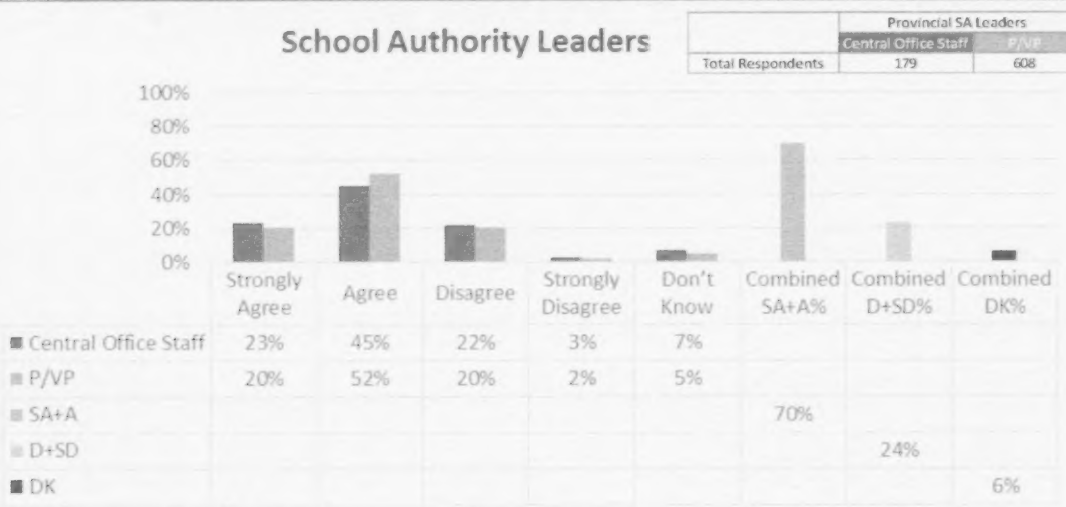
ET/IT Leaders



58

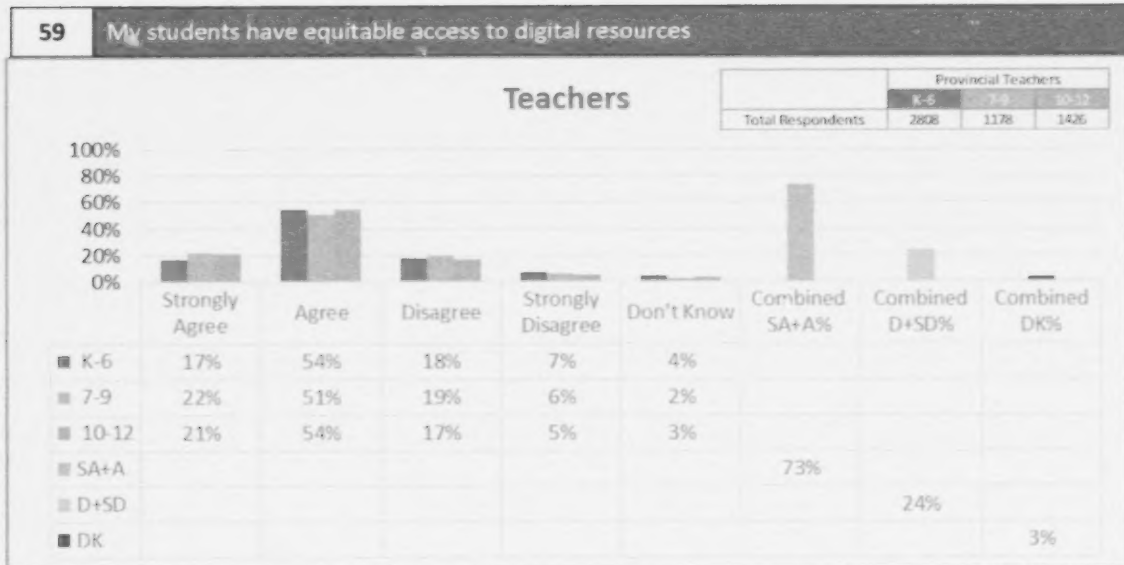
My school authority provides users with access to high-quality digital learning environments. DLEs are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond.

School Authority Leaders

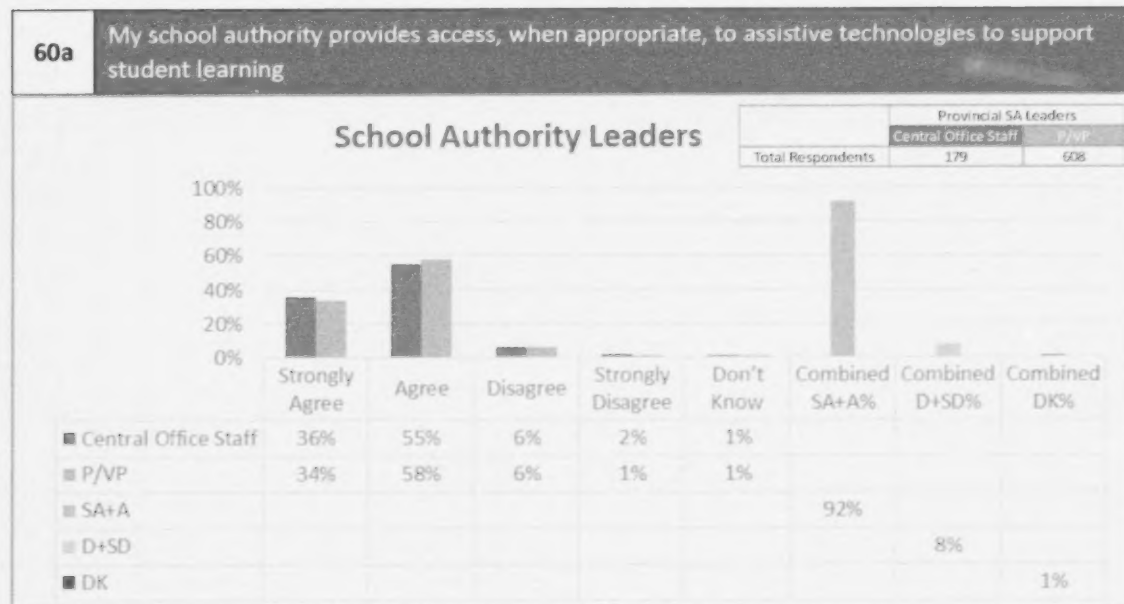




4. Digital Resources



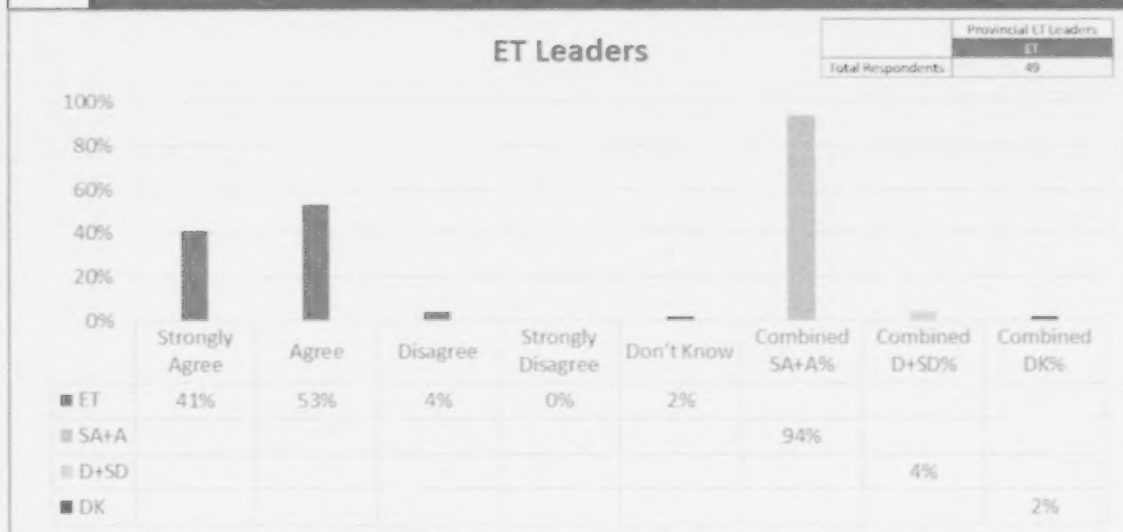
5. Access to Assistive Technologies to Support Learning





60b

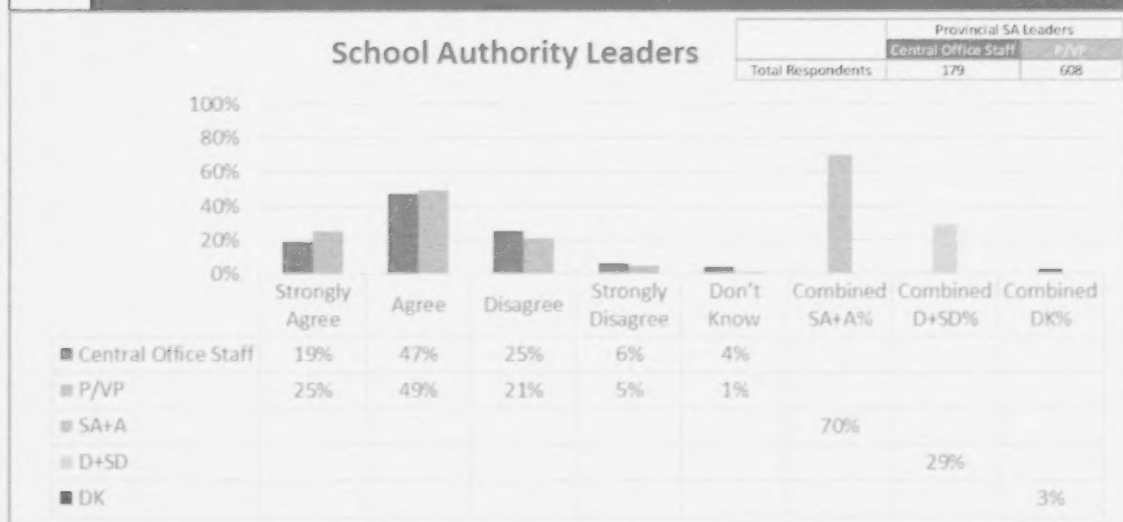
My school authority provides access, when appropriate, to assistive technologies to support student learning



6. Access to peripherals, i.e. printers, scanners, cameras, etc.

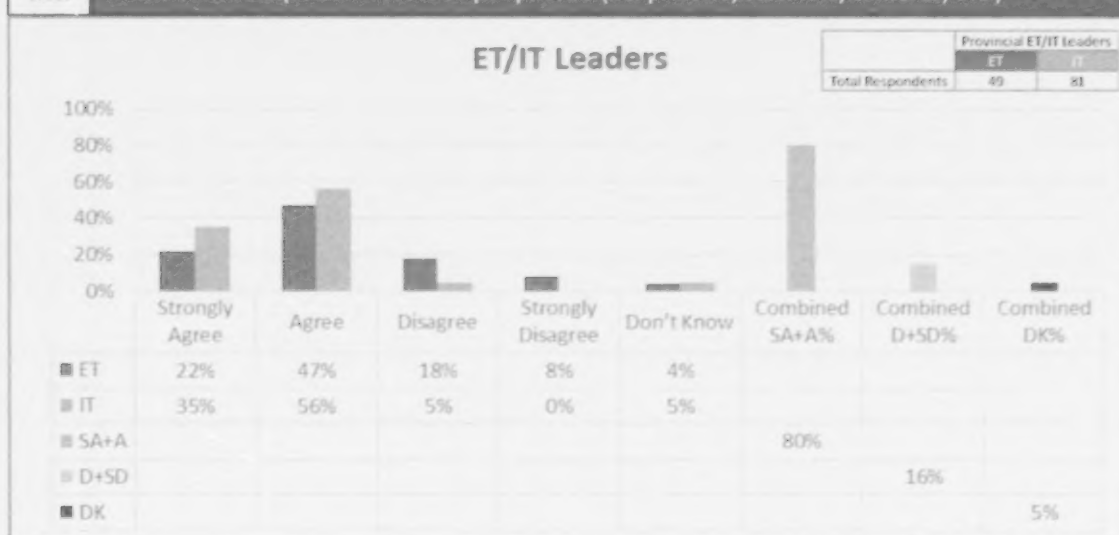
61a

Students have equitable access to peripherals (i.e. printers, scanners, cameras, etc.)



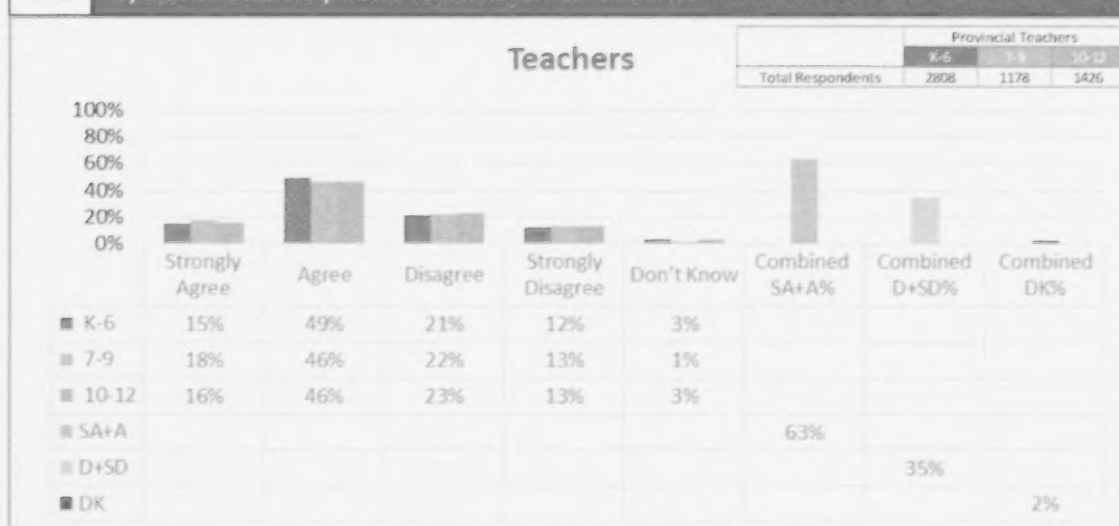


61b Students have equitable access to peripherals (i.e. printers, scanners, cameras, etc.)



7. Equitable Access to Reliable Networks

62a My students have equitable access to reliable networks

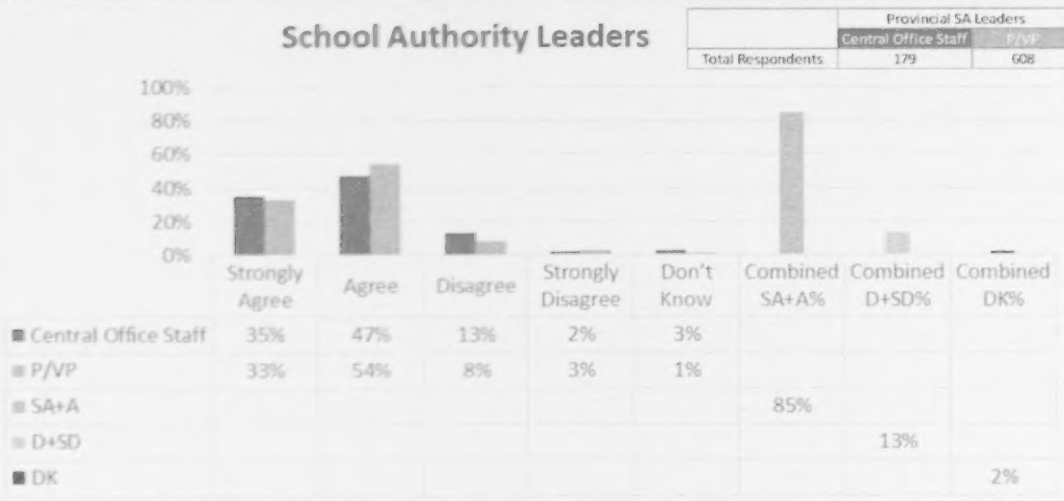




62b

Students have equitable access to data networks that allow access to the Internet and other data and applications

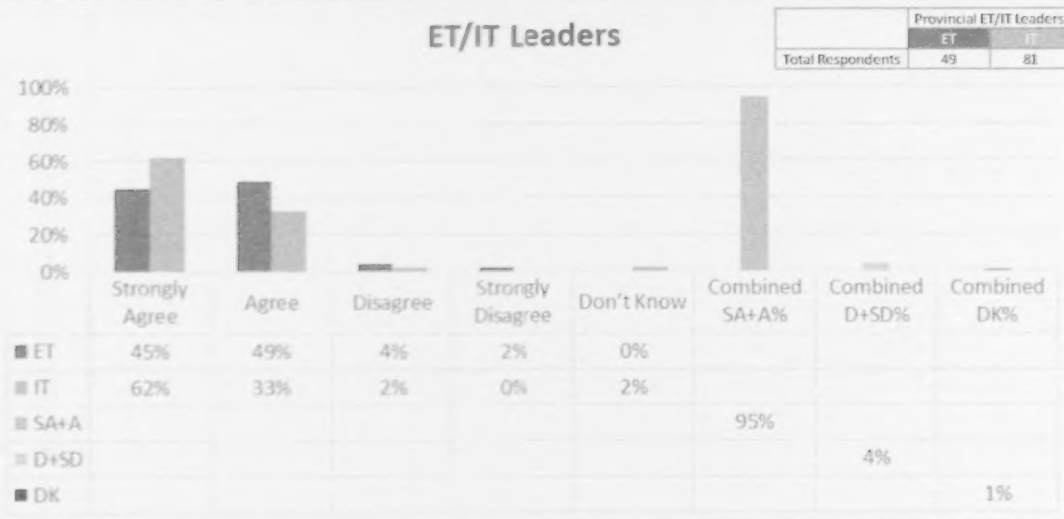
School Authority Leaders



62c

Students have equitable access to data networks that allow access to the Internet and other data and applications

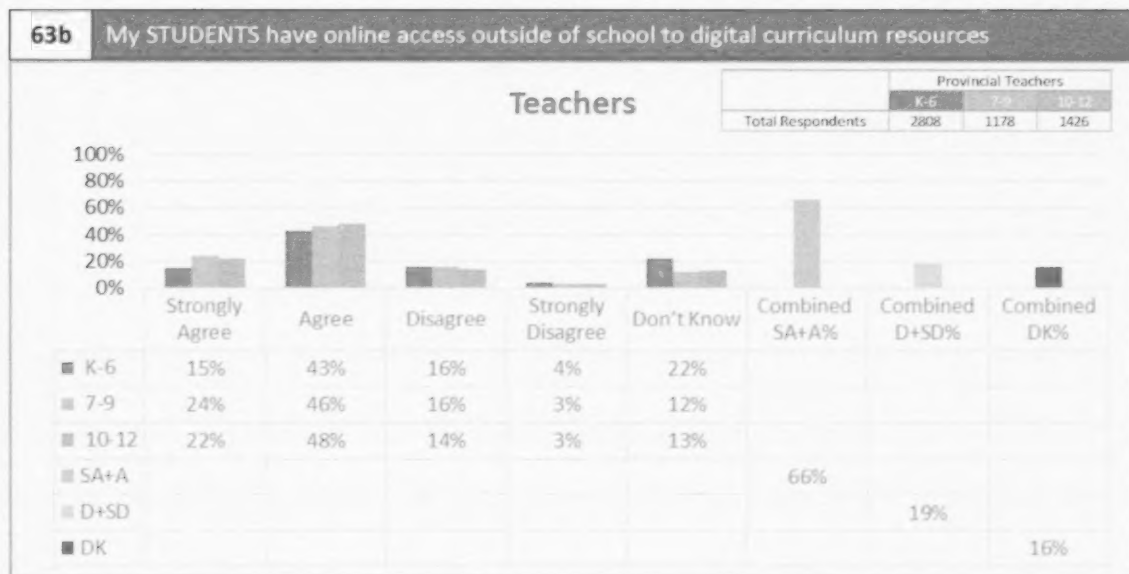
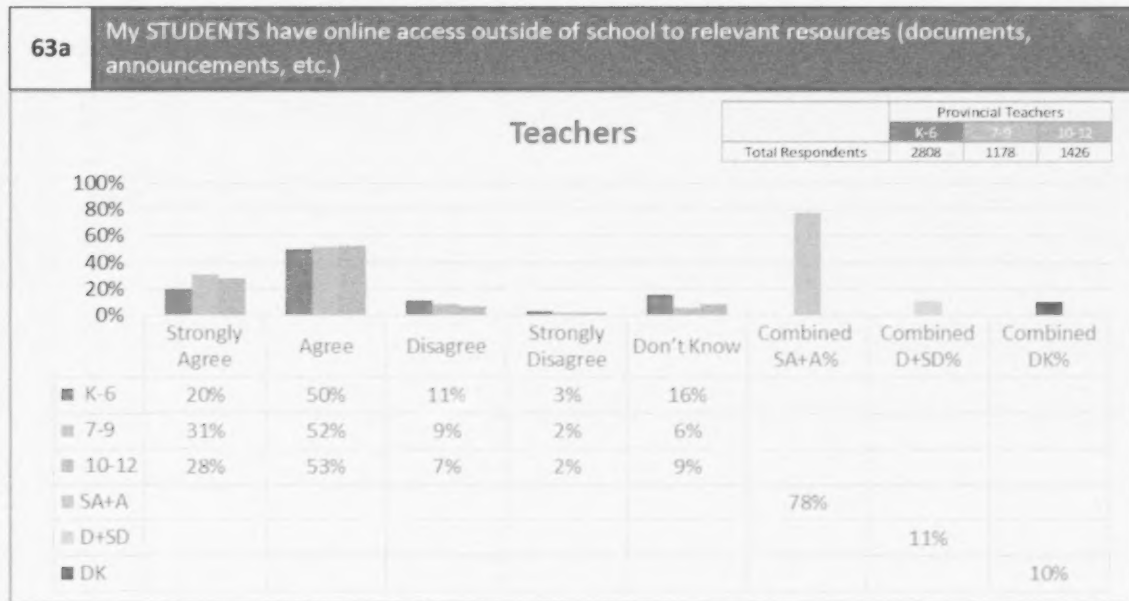
ET/IT Leaders





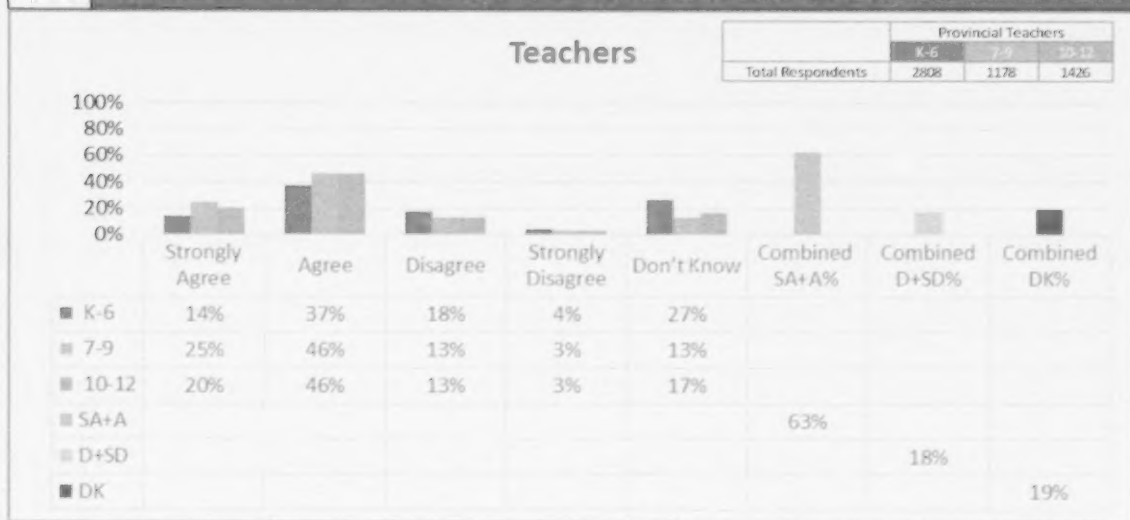
B. Student Online Access

1. To Resources:





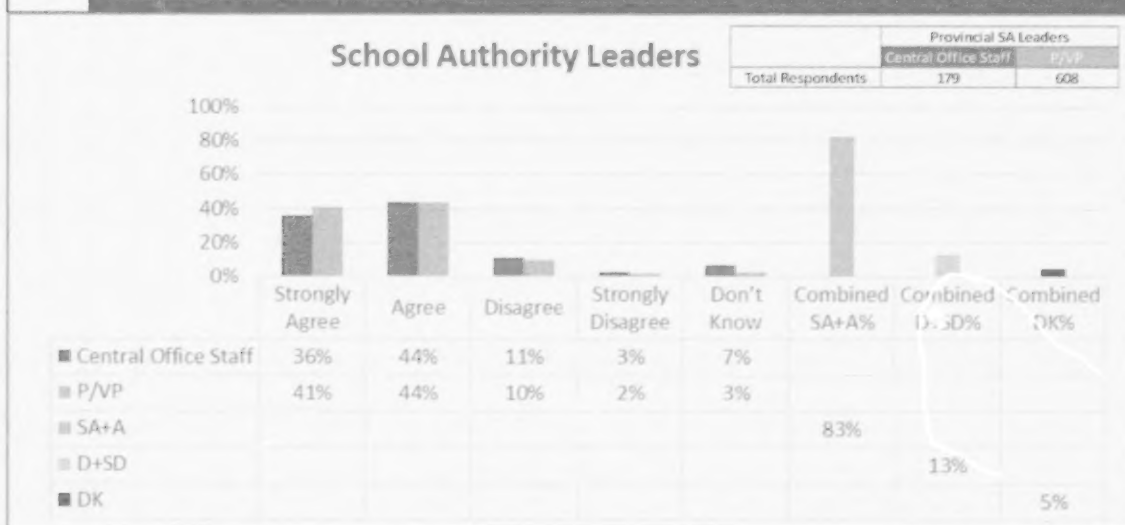
63c My STUDENTS have online access outside of school to collaboration tools



2. 24/7 Access To Resources:

64a

Our STUDENTS have 24/7, online access to relevant administrative resources (policies, forms, documents, announcements, etc.)



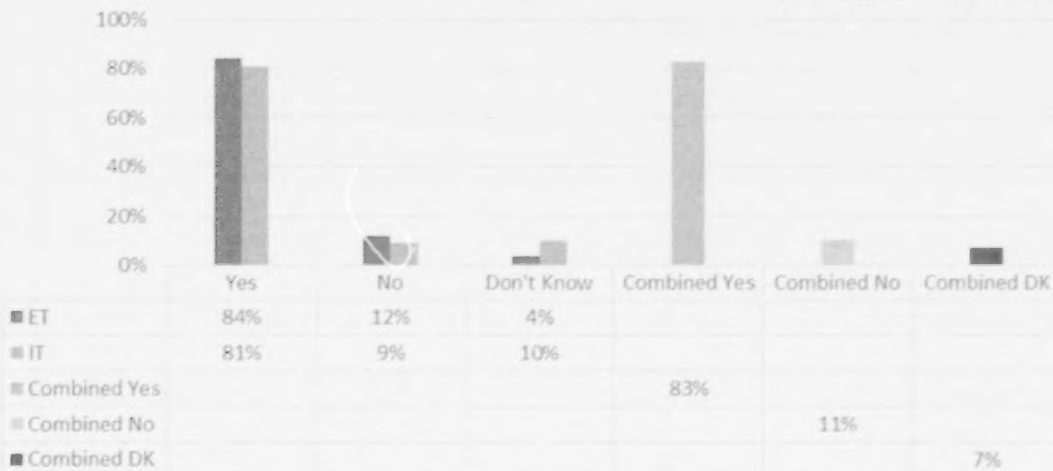


64b

Our STUDENTS have 24/7, online access to relevant administrative resources (policies, forms, documents, announcements, etc.)

ET/IT Leaders

	Provincial ET/IT Leaders	
	ET	IT
Total Respondents	49	81

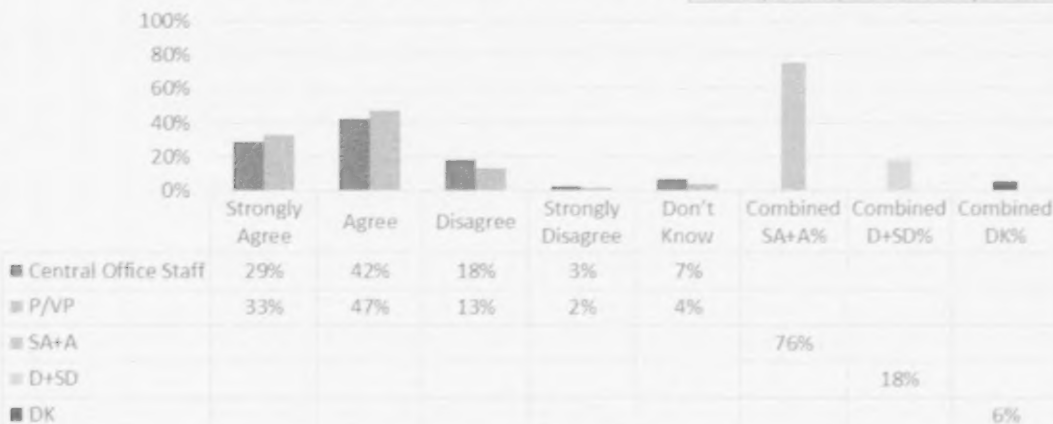


64c

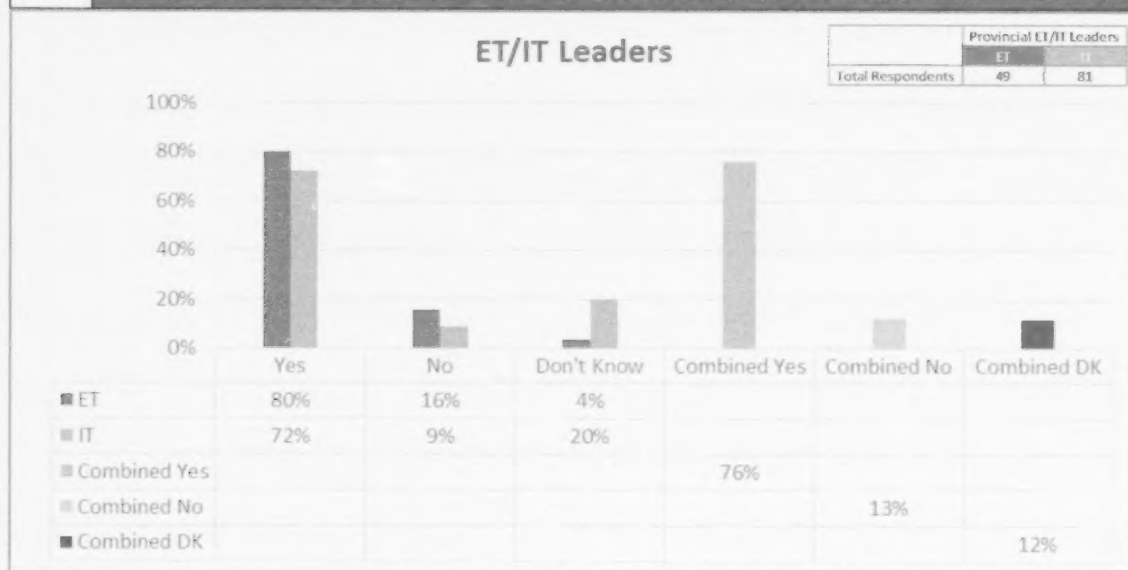
Our STUDENTS have 24/7, online access to digital curriculum resources

School Authority Leaders

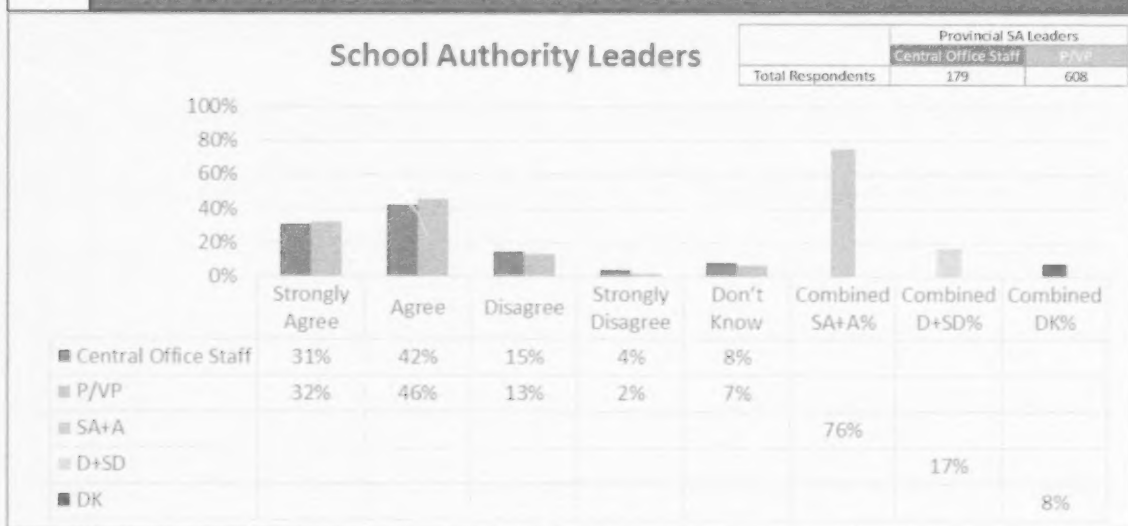
	Provincial SA Leaders	
	Central Office Staff	P/VP
Total Respondents	179	608



64d Our STUDENTS have 24/7, online access to digital curriculum resources

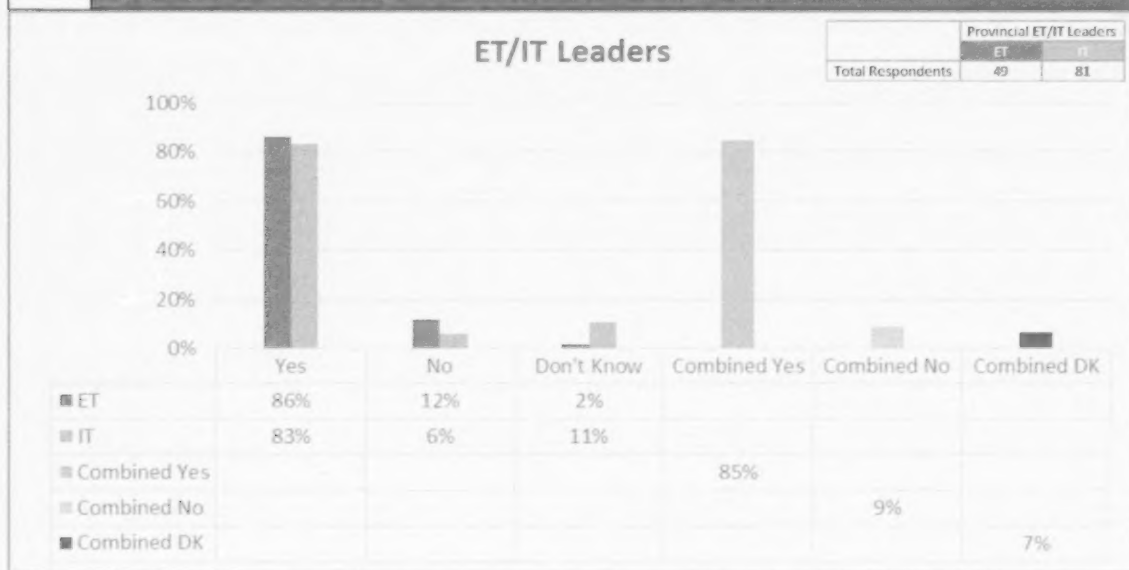


64e Our STUDENTS have 24/7, online access to collaboration tools





64f Our STUDENTS have 24/7, online access to collaboration tools



3. Web Access To Their Files

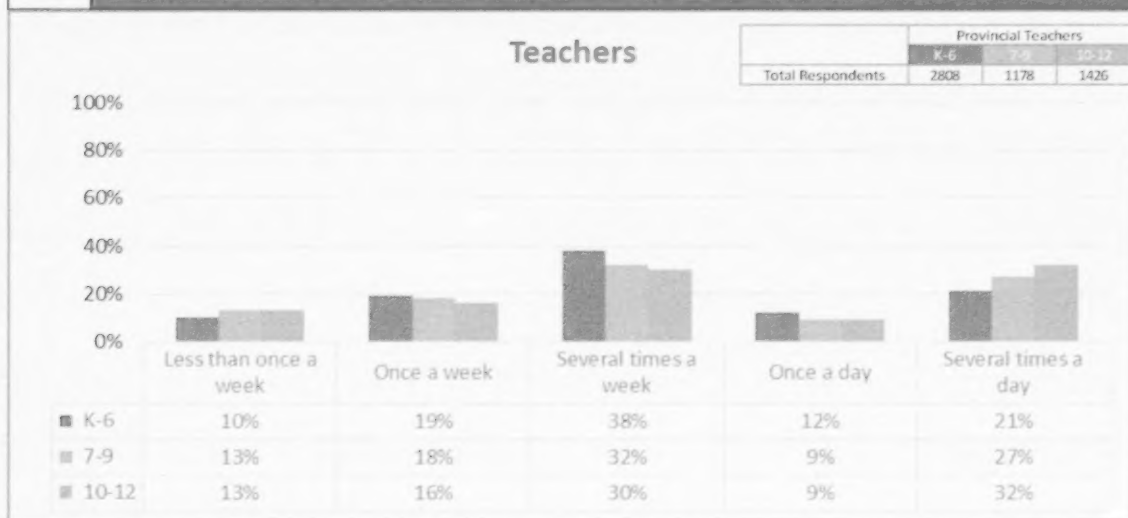
65 Does the school authority provide students with web access to their files from anywhere?





C. Student Use of Technology

66 On average, how often do your students use technology within class?



Combined Less than once a week = 12%

Combined Once a week = 18%

Combined Several times a week = 33%

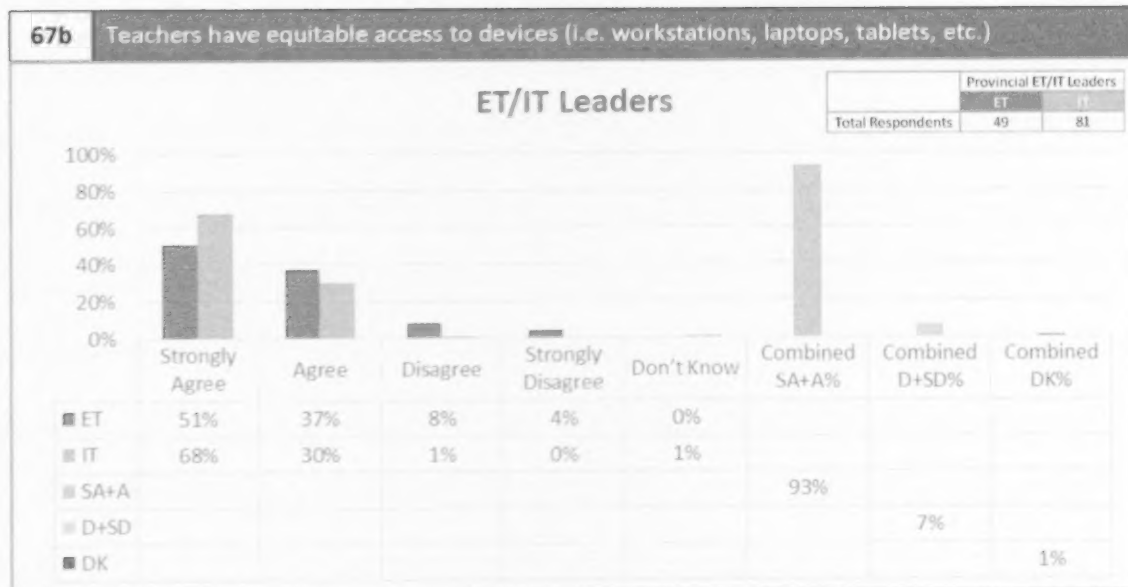
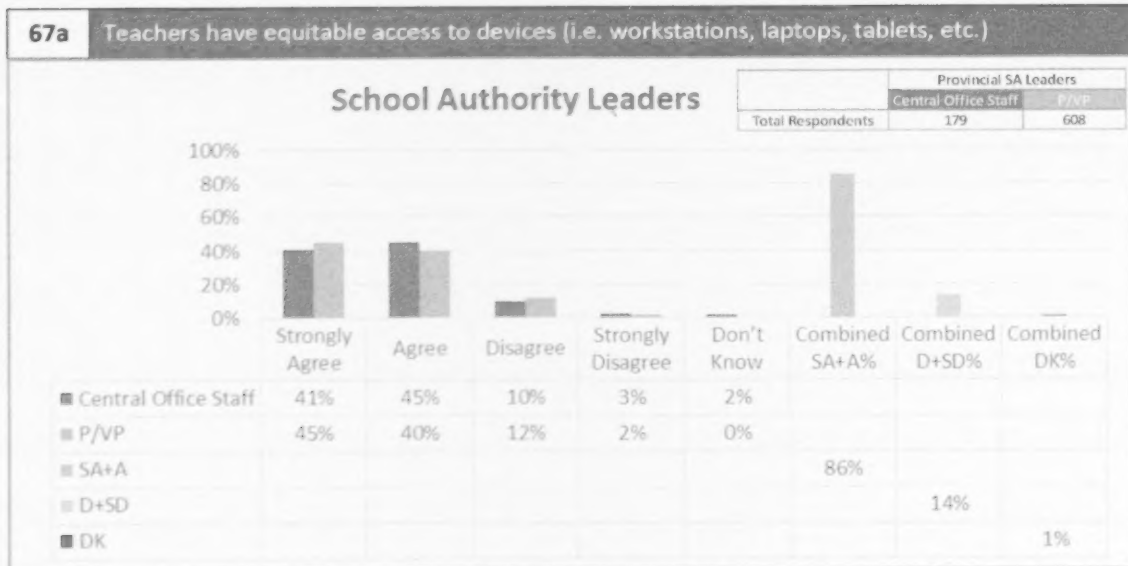
Combined Once a day = 10%

Combined Several times a day = 27%



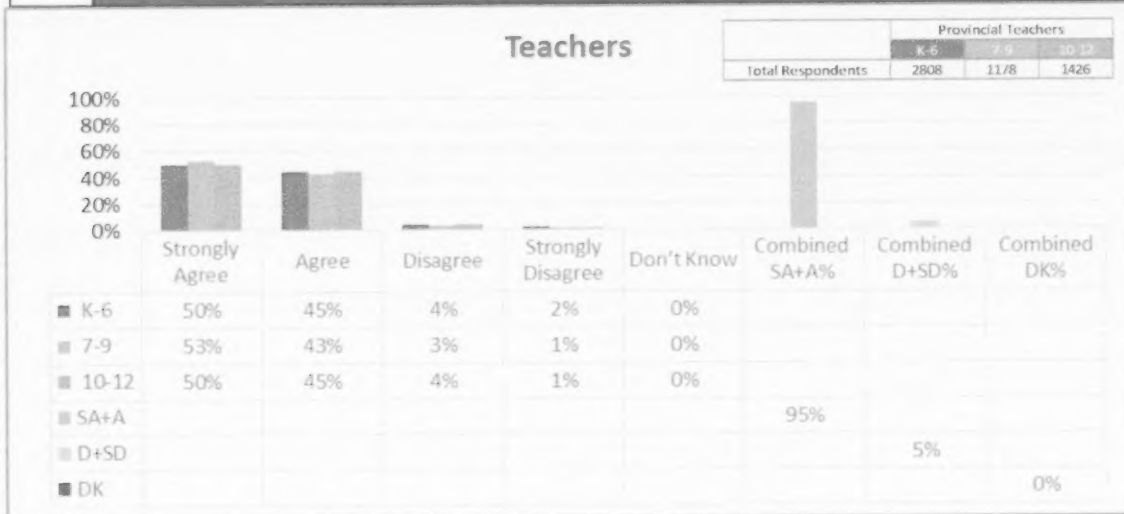
D. Teacher Access at School

1. Access to Devices i.e. desktops, laptops, tablets...



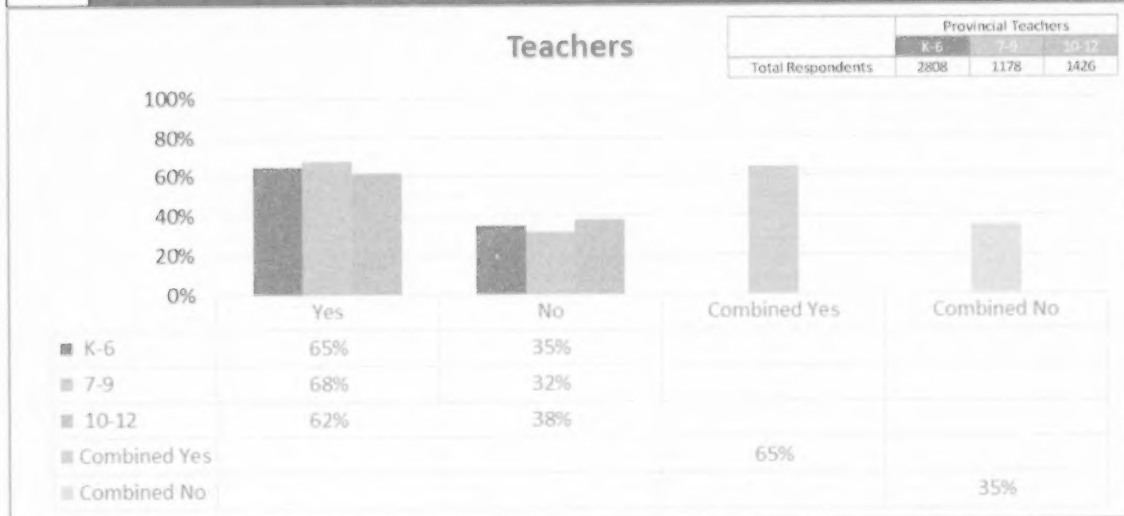


67c In my school I have access to electronic devices (i.e. desktops, laptops, tablets)



68

Do you have exclusive access to a school authority supplied mobile electronic device (i.e. laptop, tablet or iPad)?



69

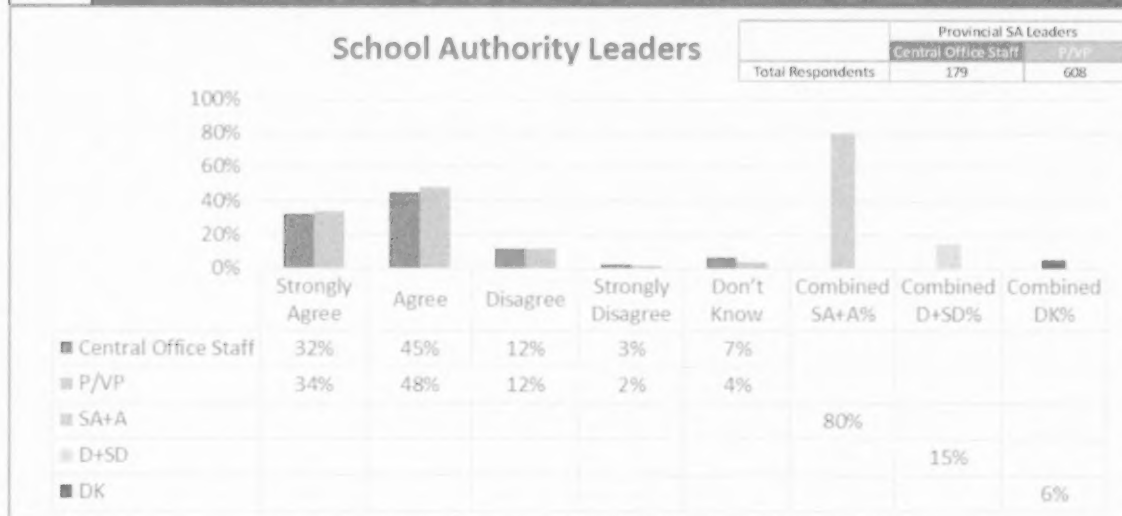
For each of the following, please indicate the total percentage of devices where teachers have exclusive access (Total can exceed 100% with no box left blank so use a 0 if appropriate)



2. Access to Digital Learning Environments

70a

Teachers have equitable access to digital learning environments. DLE are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond





70b

Teachers have equitable access to digital learning environments. DLE are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond

ET/IT Leaders



70c

In my school I have access to digital learning environments. DLE are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond

Teachers

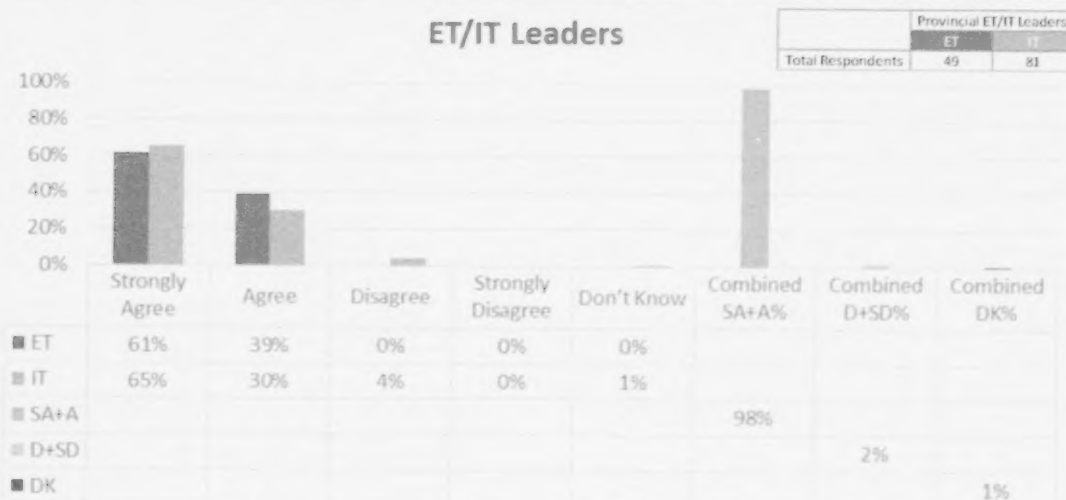




71a

My school authority provides a digital learning environment that integrates access to (Digital learning environments are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond): communication tools (IM, email, etc.)

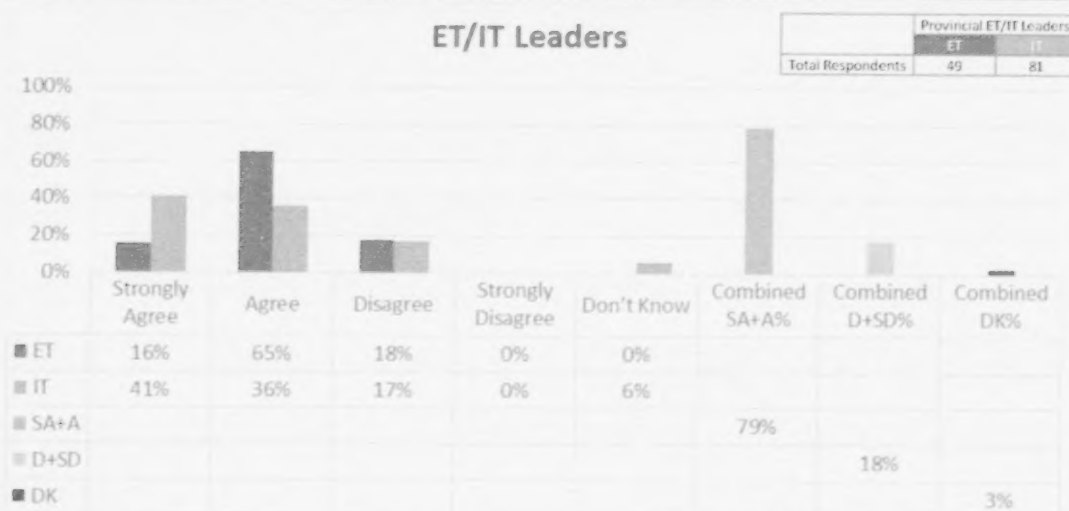
ET/IT Leaders



71b

My school authority provides a digital learning environment that integrates access to (Digital learning environments are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond): resource libraries (digital video libraries, electronic textbooks)

ET/IT Leaders

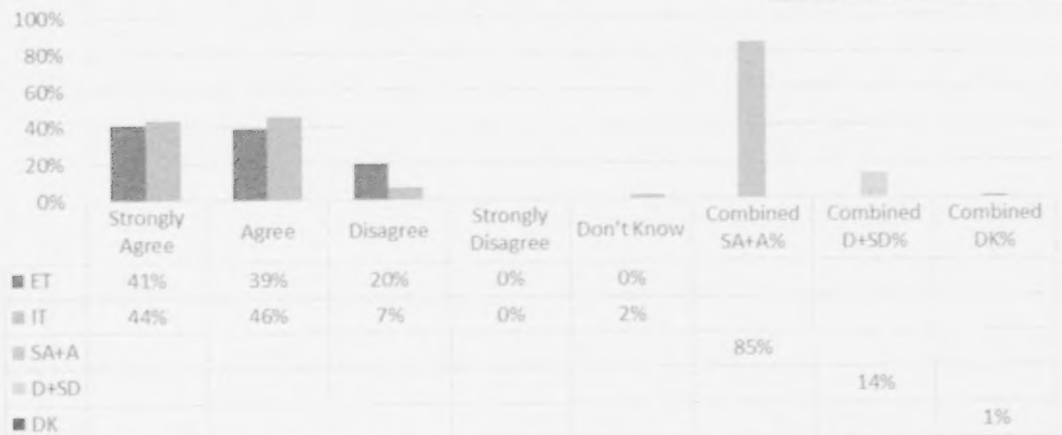




71c

My school authority provides a digital learning environment that integrates access to (Digital learning environments are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond): file exchanges (Homework drop box, document repository)

ET/IT Leaders



71d

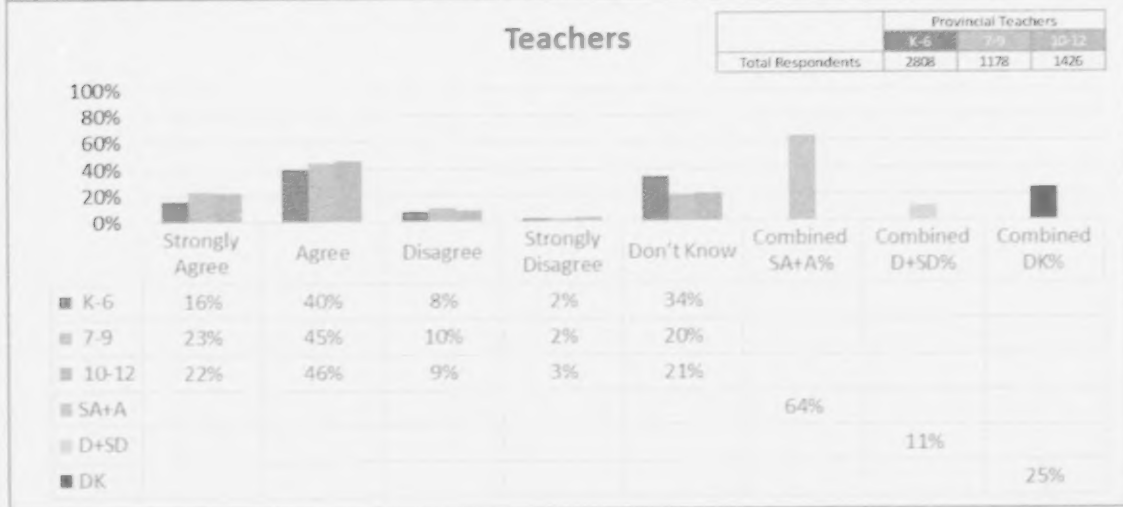
My school authority provides a digital learning environment that integrates access to (Digital learning environments are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond): learning and content management (Moodle, SharePoint, D2L, etc.)

ET/IT Leaders

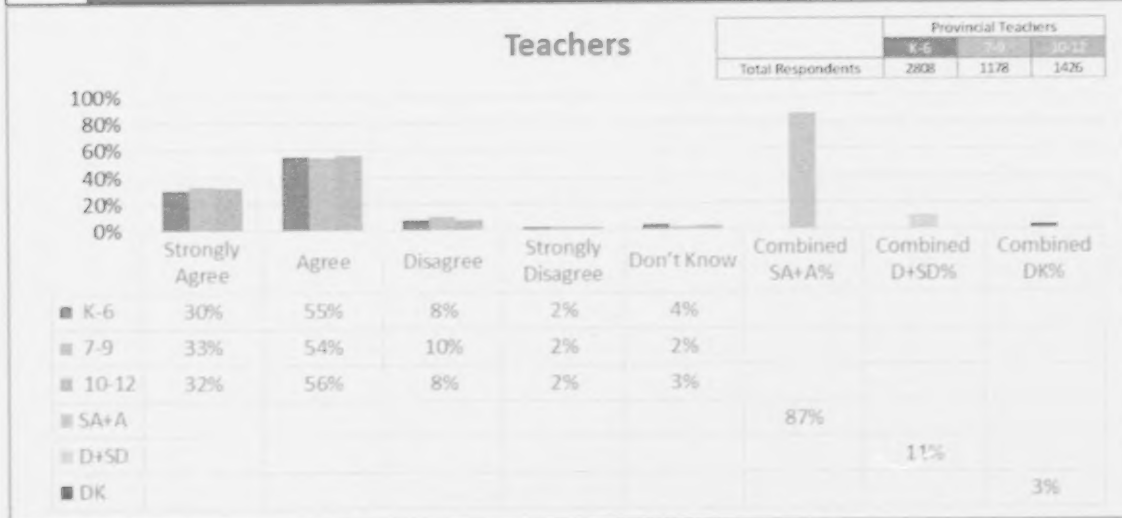




72 As a teacher, I have access digital repository for digital resources/digital content

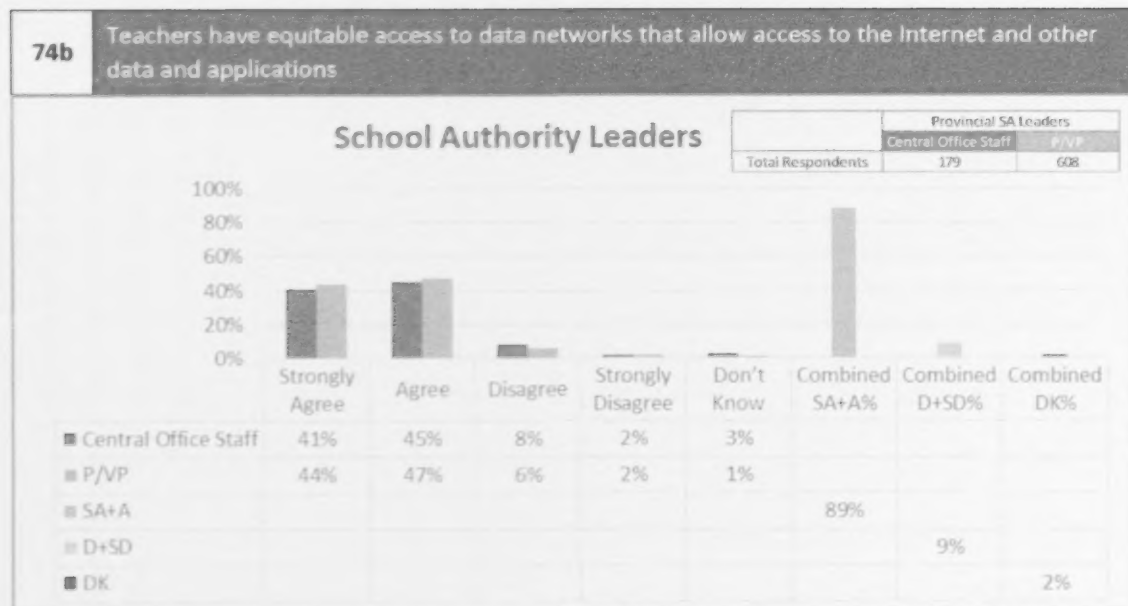
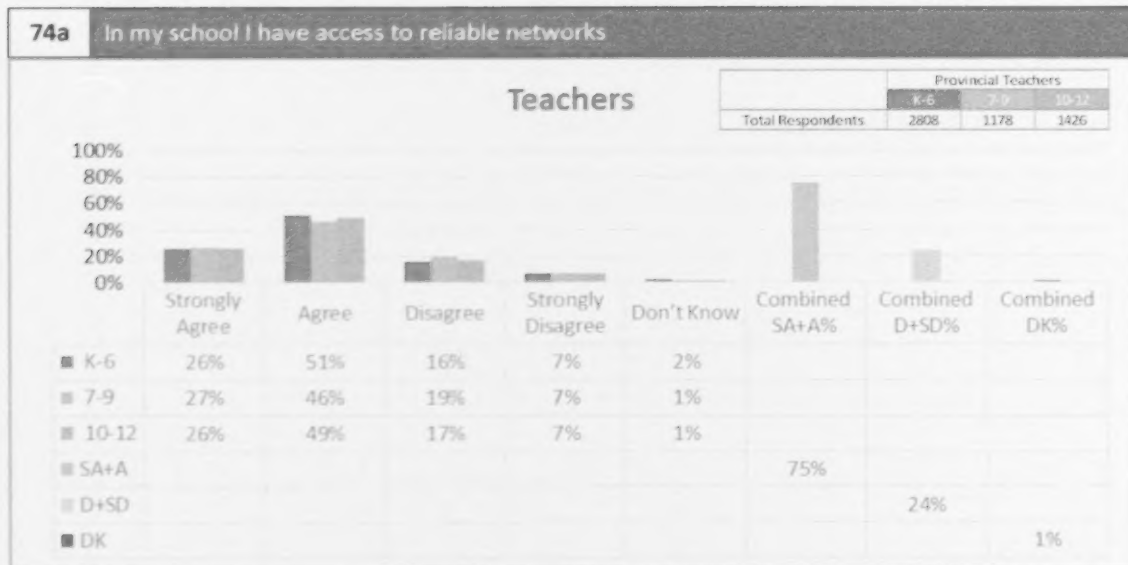


73 In my school I have access to digital resources





3. Reliable Networks

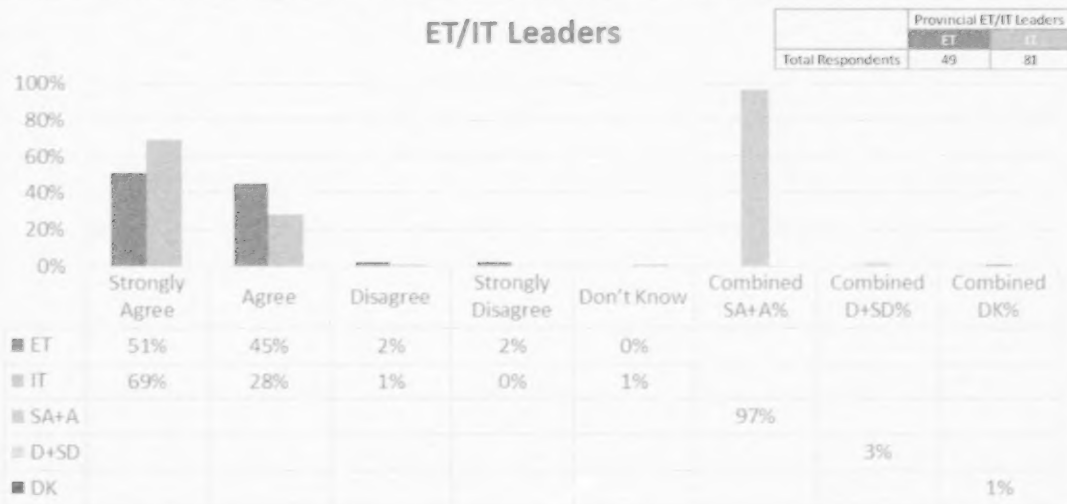




74c

Teachers have equitable access to data networks that allow access to the Internet and other data and applications

ET/IT Leaders



75a

My school authority provides users with access to well-designed, high-speed, reliable and sustainable networks and technology infrastructures

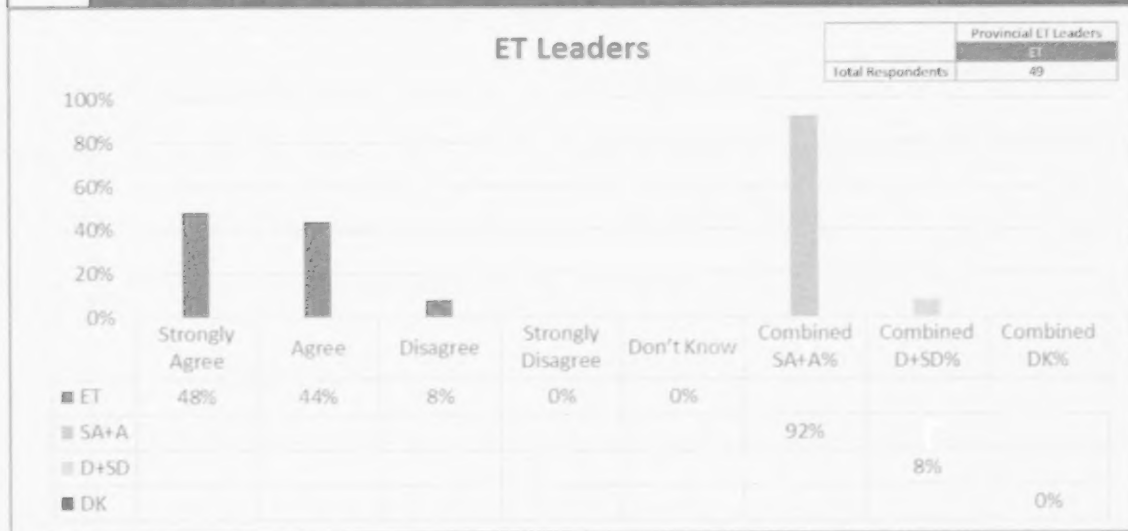
School Authority Leaders





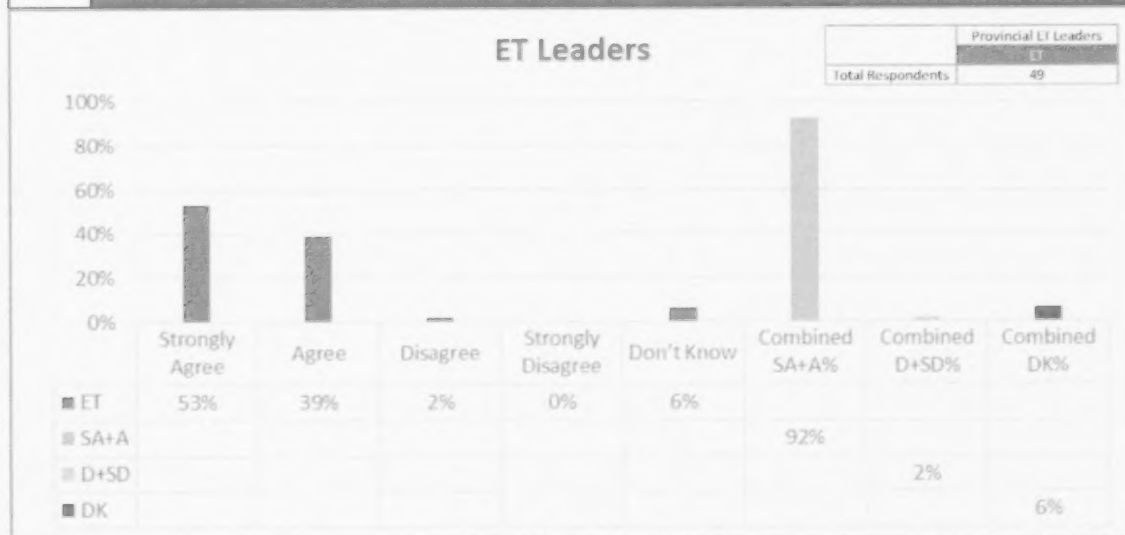
75b

My school authority provides users with access to well-designed, high-speed, reliable and sustainable networks and technology infrastructures



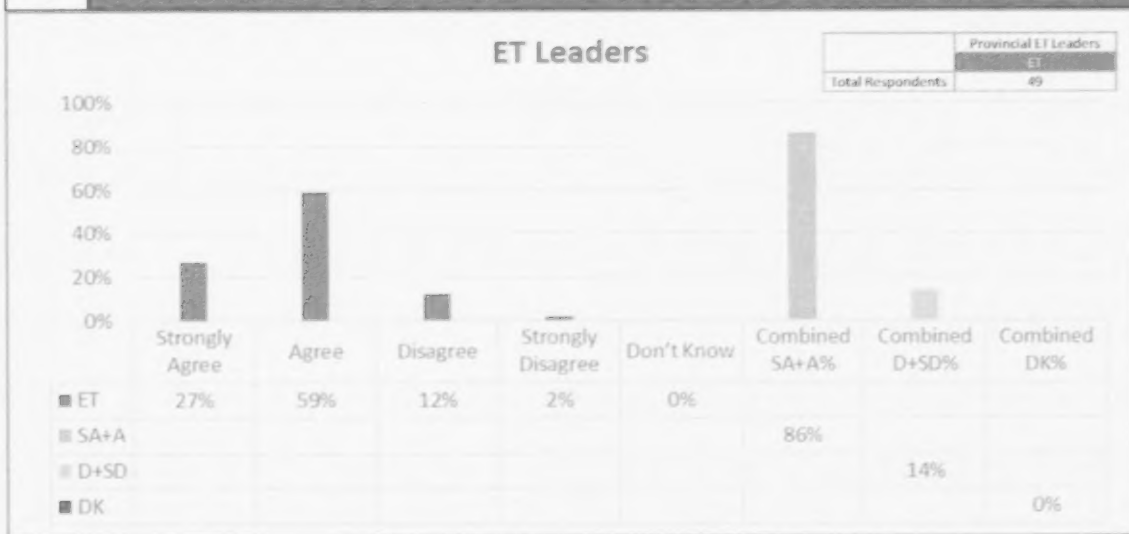
76

My school authority ensures the administration of secure networks



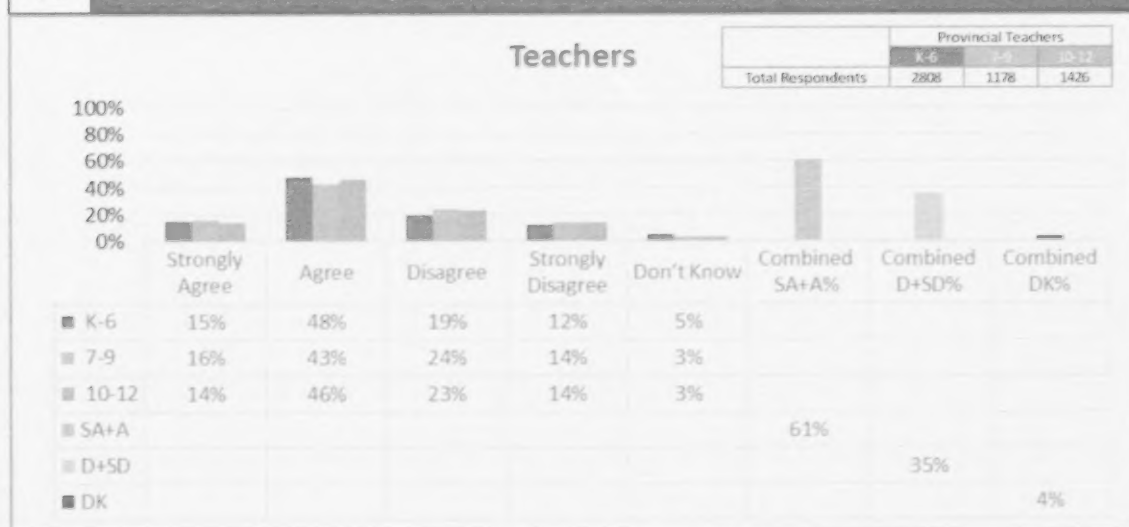


77 My school authority provides users with access to high-quality digital learning environments



4. Wireless

78 The wireless network in my school meets the requirements for learning.

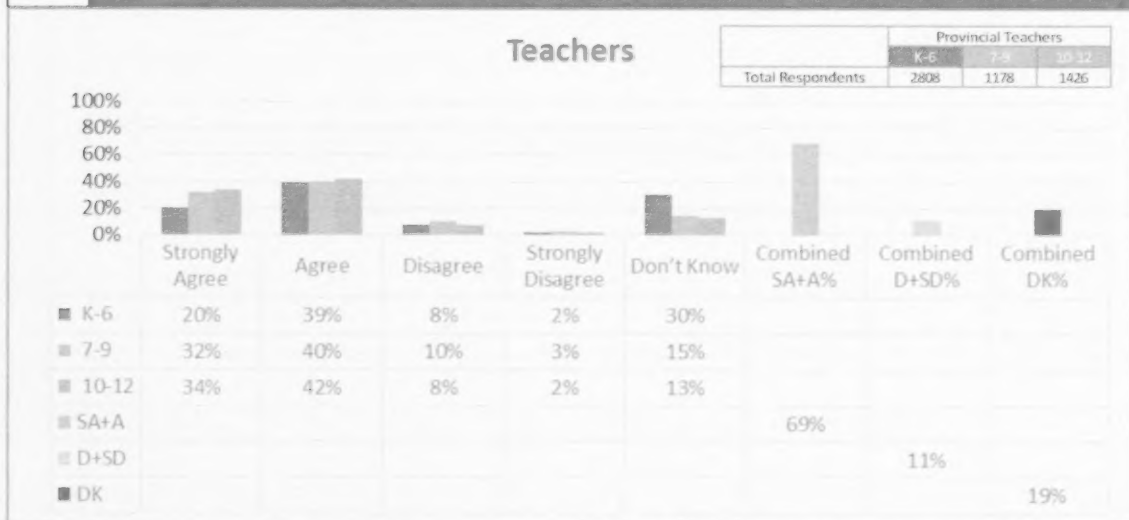


79 What percentage of schools offer 100% wireless network coverage?



5. Learning Management System (LMS)

80 As a teacher, I have access to learning content/resource management system (i.e. Moodle, D2L)





81

Which of the following Learning Management Systems is the PREDOMINANT one in your school authority?



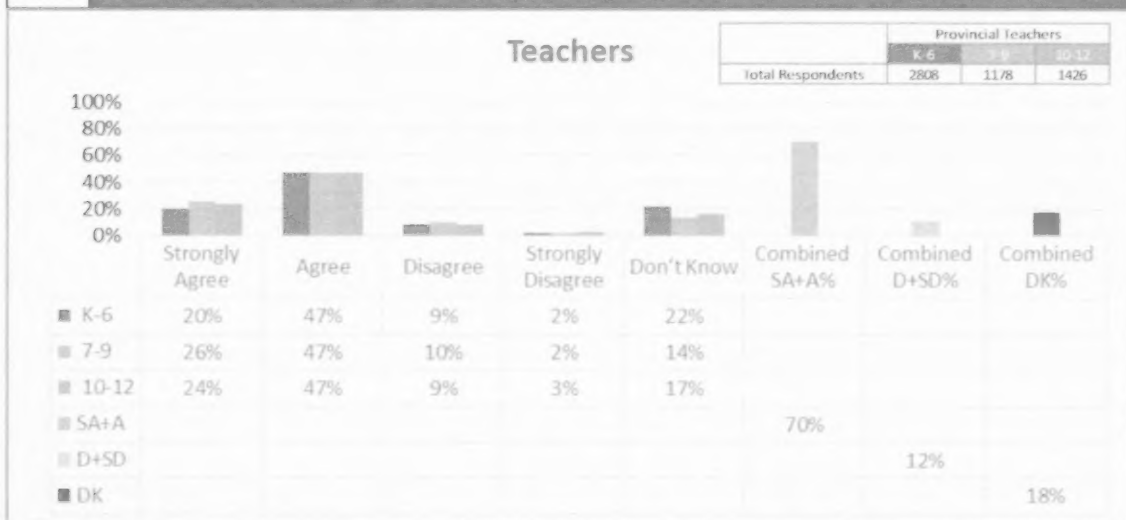
"Others" listed were:

- Google with 11 responses
- SharePoint, SmartBoard and Moodle each with 2 responses
- Single responses for: FirstClass, PowerSchool, Webcrossing, GAFE, D2L, Teacher Logic, Open Class

6. Web 2.0 Tools

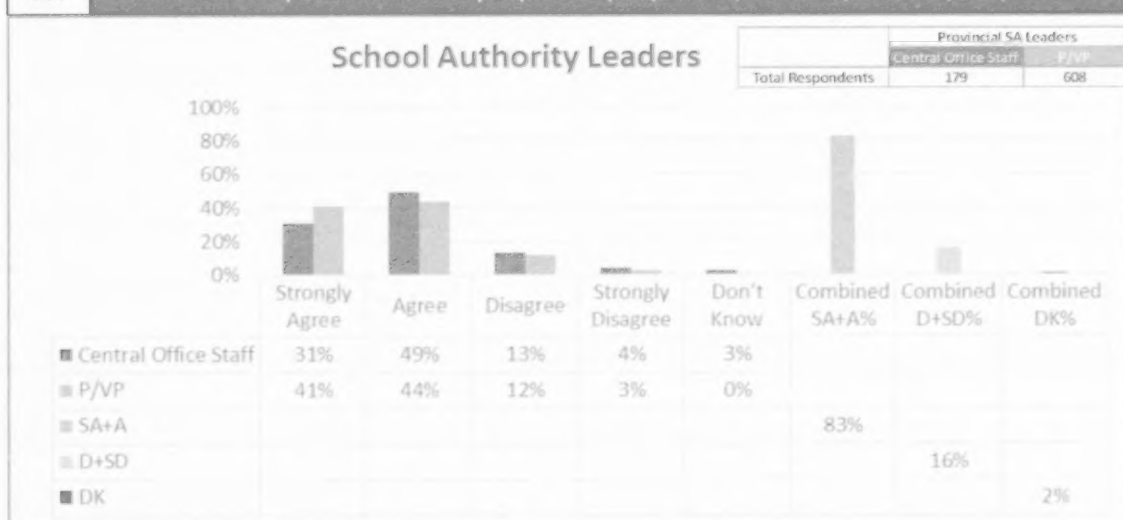
82

As a teacher, I have access to Web 2.0/social media tools/systems (ie. wiki, blog, twitter)

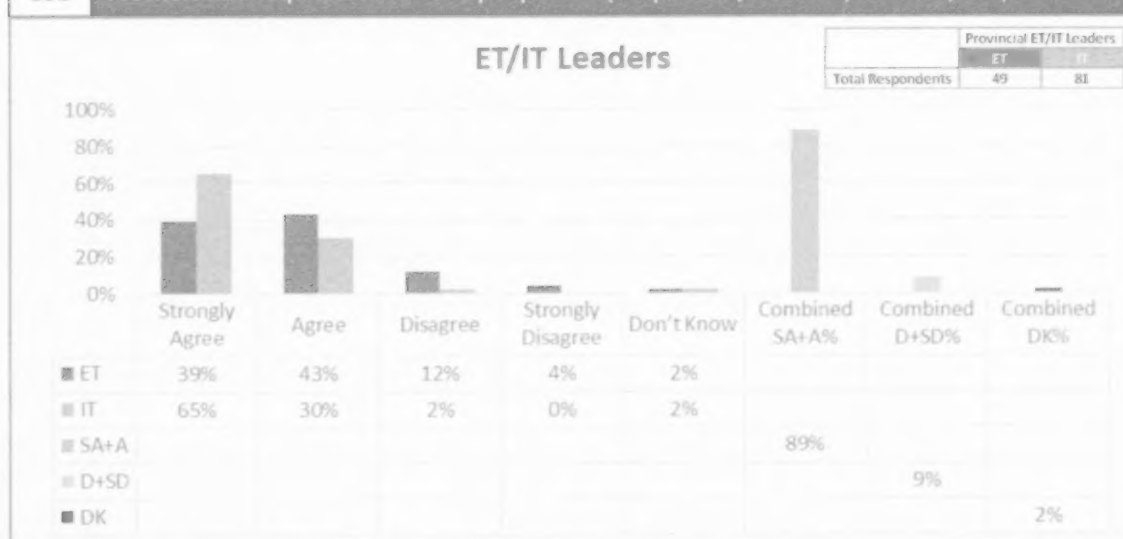


7. Equitable access to Peripherals i.e. Printers, Scanners, Cameras, etc..

83a Teachers have equitable access to peripherals (i.e. printers, scanners, cameras, etc.)



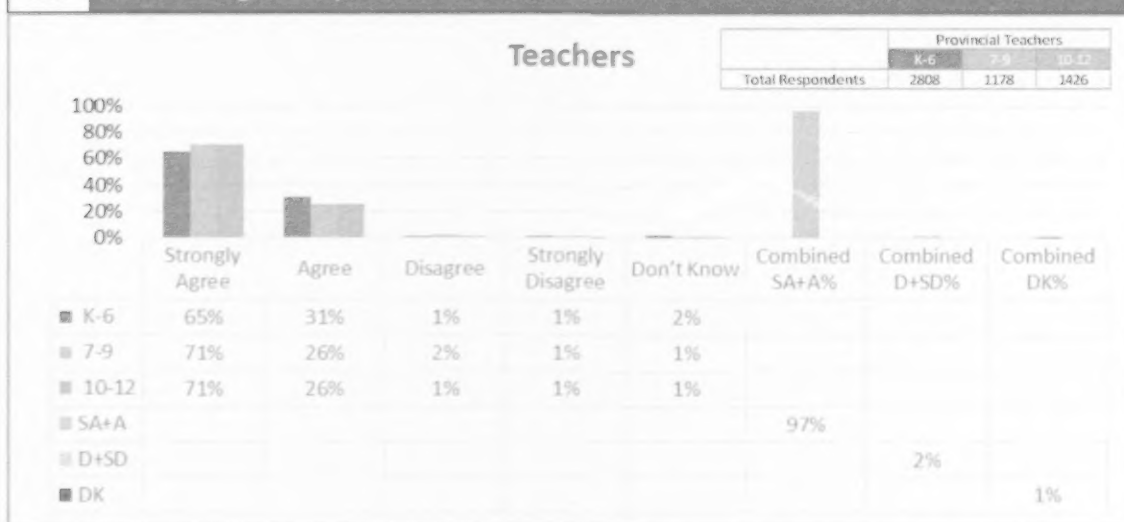
83b Teachers have equitable access to peripherals (i.e. printers, scanners, cameras, etc.)





8. Ministry Licensed Tools

84a The following Ministry licensed tools are valuable to me: Microsoft Office.



84b The following Ministry licensed tools are valuable to my school/school authority: The Provincial Microsoft Office License.





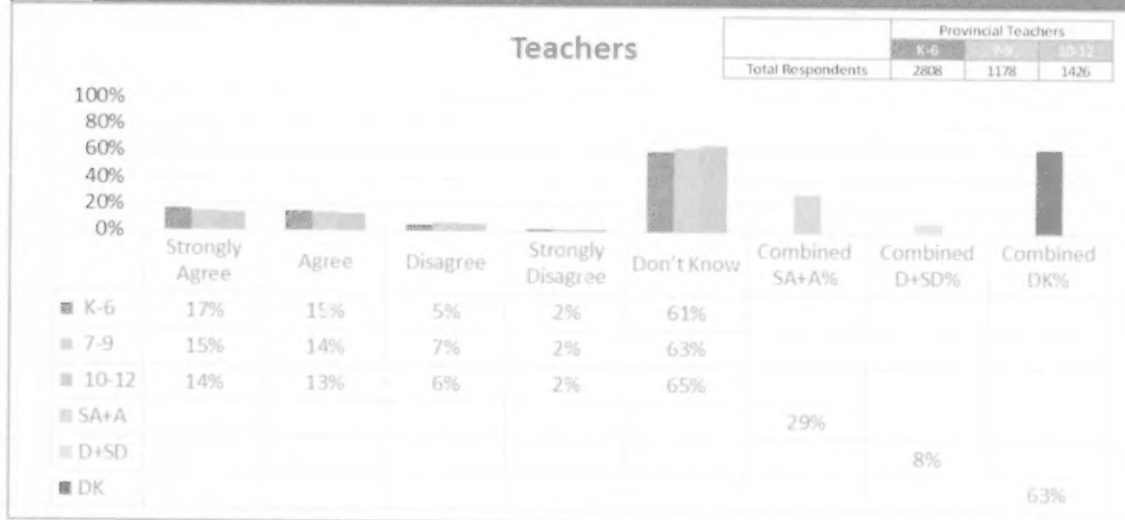
84c

The following Ministry licensed tools are valuable to my school/school authority: The Provincial Microsoft Office License.



84d

The following Ministry licensed tools are valuable to me: Passport to the Internet License

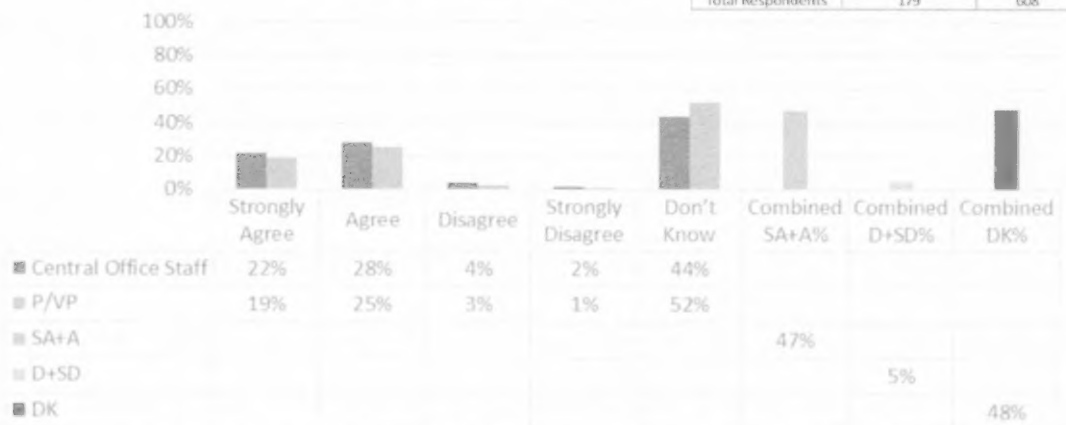




84e

The following Ministry licensed tools are valuable to my school/school authority: Passport to the Internet License

School Authority Leaders



84f

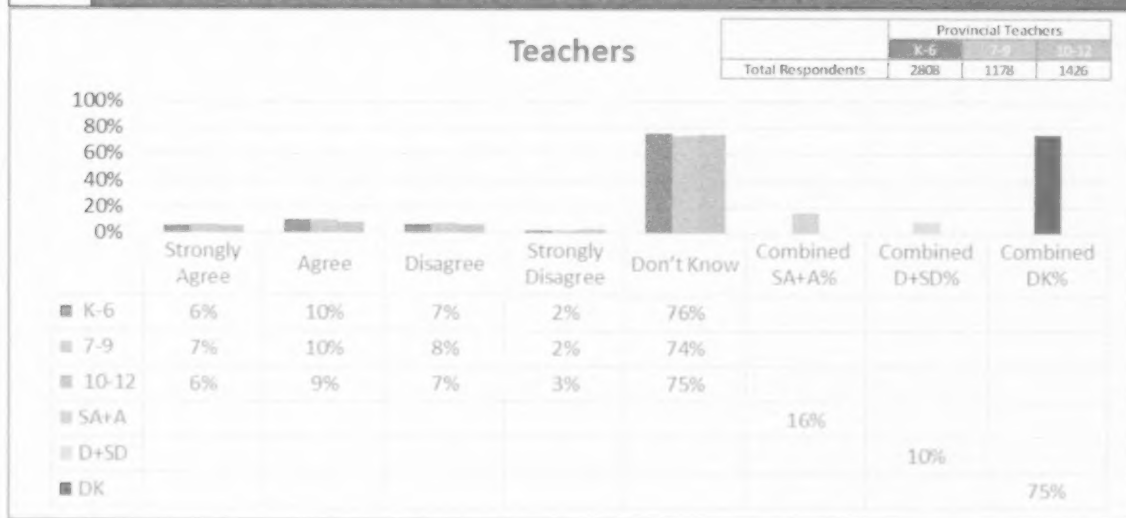
The following Ministry licensed tools are valuable to my school/school authority: Passport to the Internet License

IT Leaders

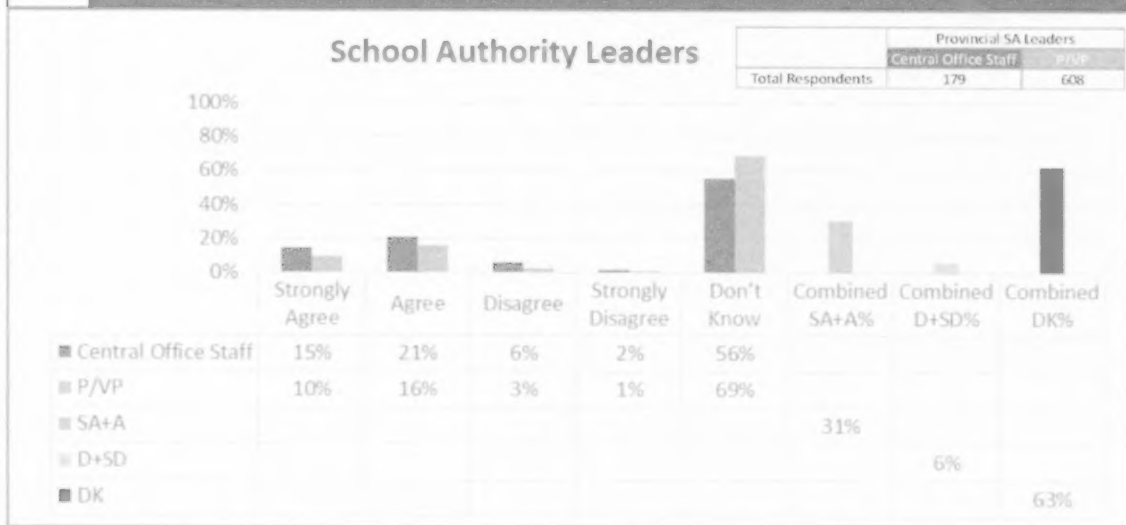




84g The following Ministry licensed tools are valuable to me: My World License



84h The following Ministry licensed tools are valuable to my school/school authority: My World License

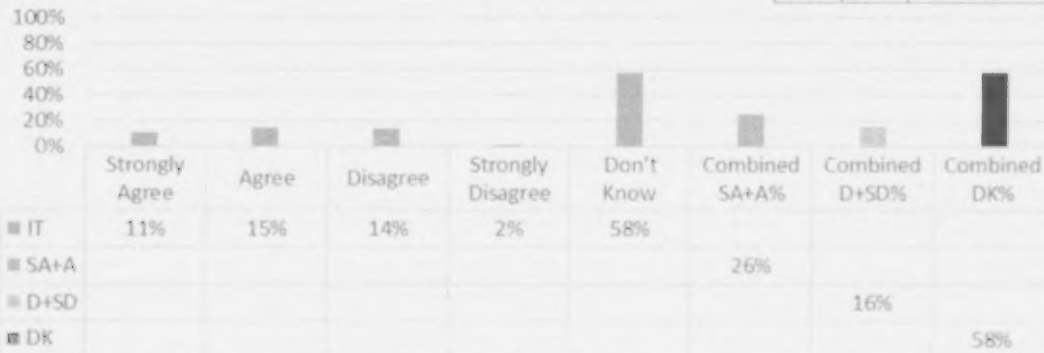




84i

The following Ministry licensed tools are valuable to my school/school authority: My World License

IT Leaders

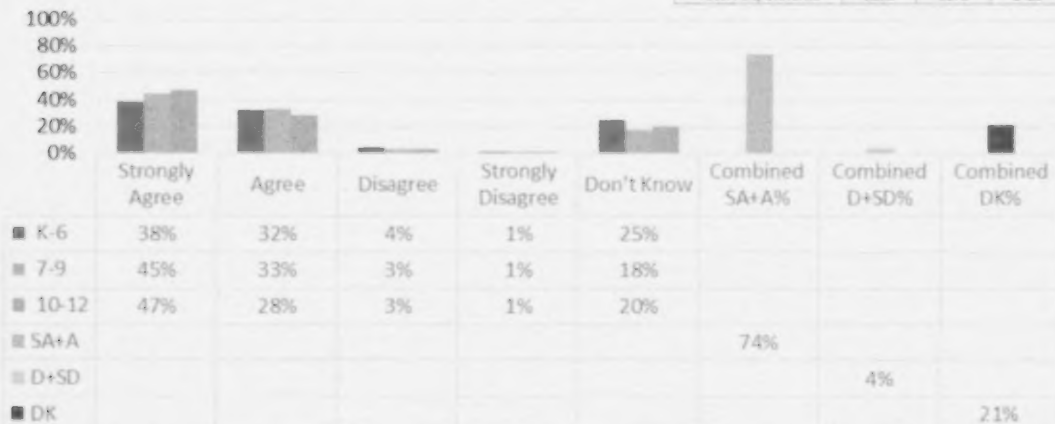


Provincial IT Leaders	
Total Respondents	81

84j

The following Ministry licensed tools are valuable to me: Adobe Licensing

Teachers



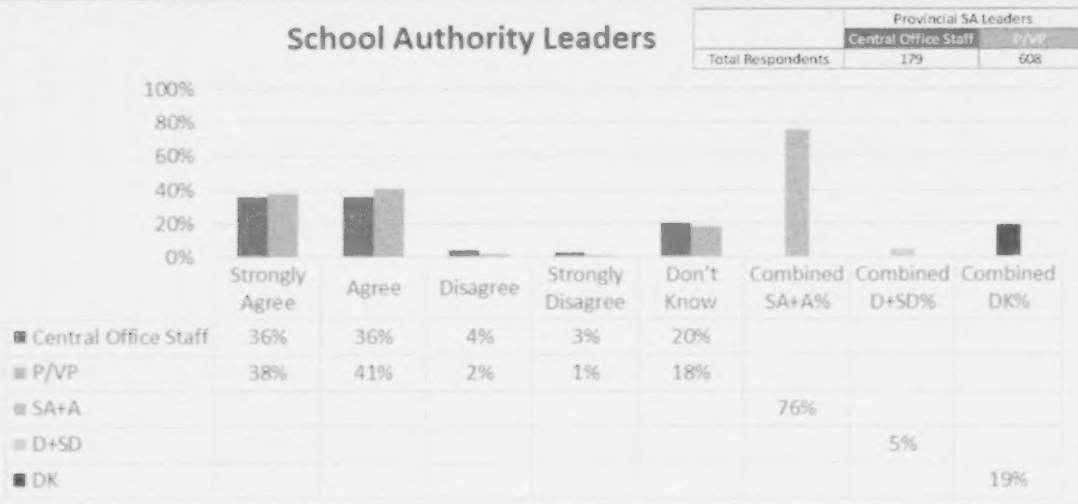
Provincial Teachers			
	K-6	7-9	10-12
Total Respondents	2808	1178	1426



84k

The following Ministry licensed tools are valuable to my school/school authority: Adobe Licensing

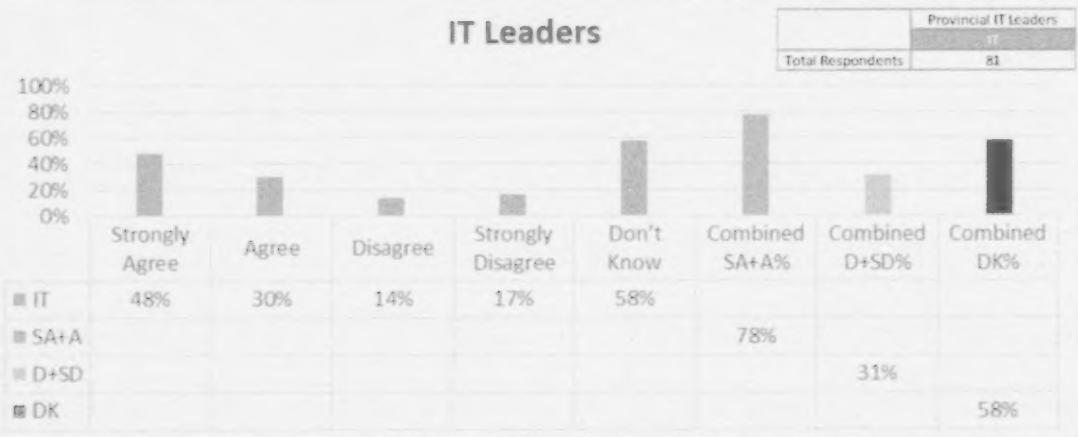
School Authority Leaders



84l

The following Ministry licensed tools are valuable to my school/school authority: Adobe Licensing

IT Leaders

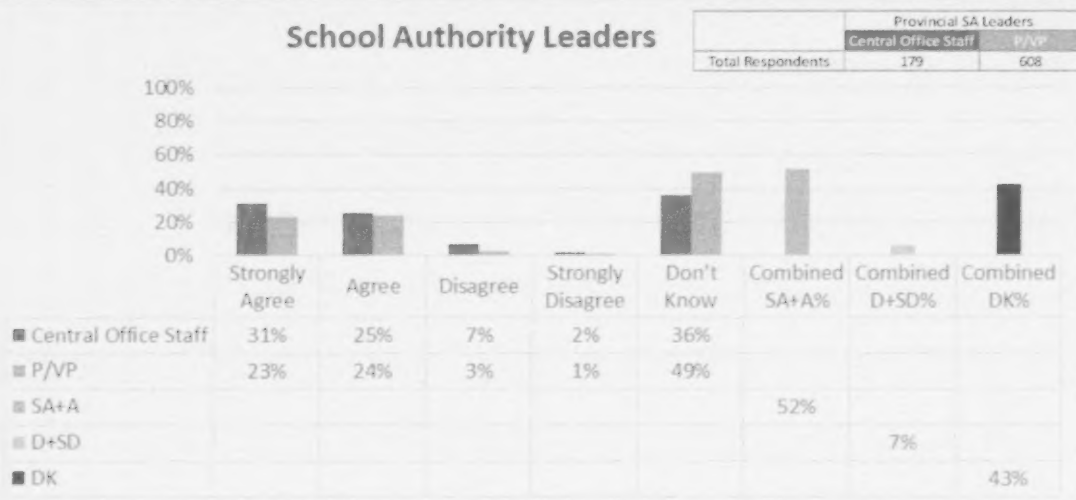




84m

The following Ministry licensed tools are valuable to my school/school authority: Provincial Microsoft Enterprise Client Access Licenses (eDesktop)

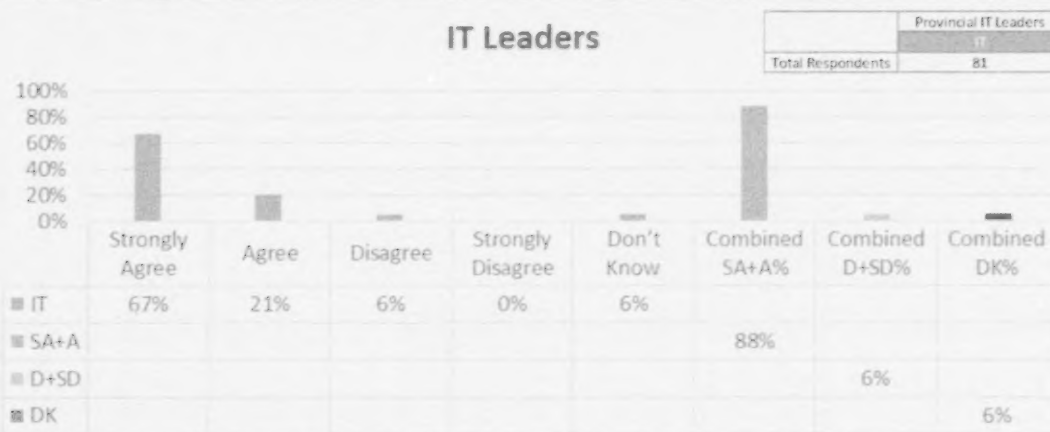
School Authority Leaders



84n

The following Ministry licensed tools are valuable to my school/school authority: Provincial Microsoft Enterprise Client Access Licenses (eDesktop)

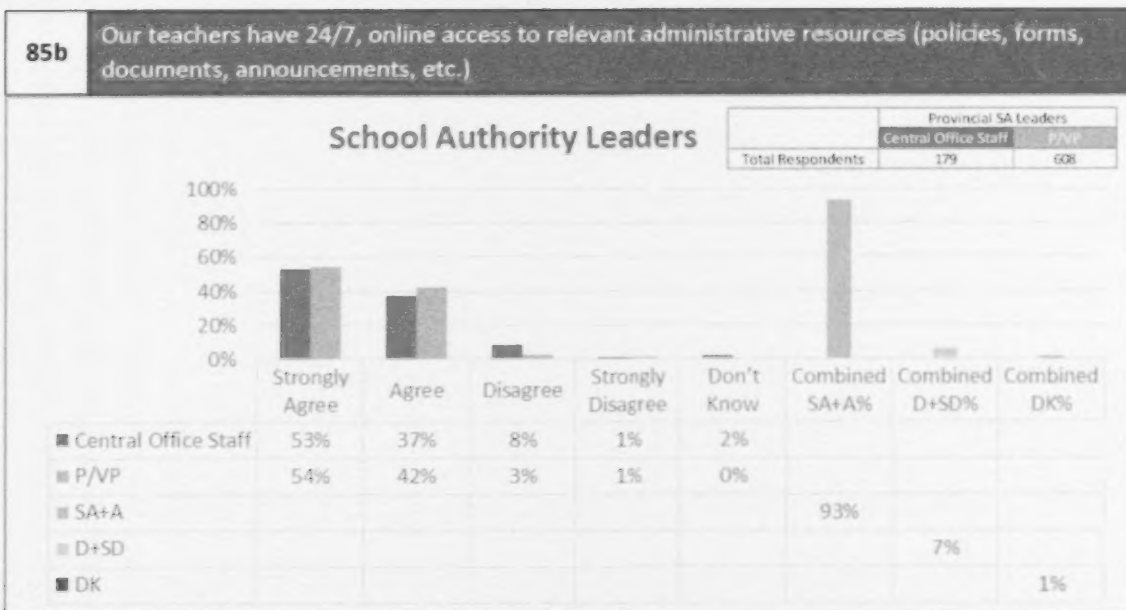
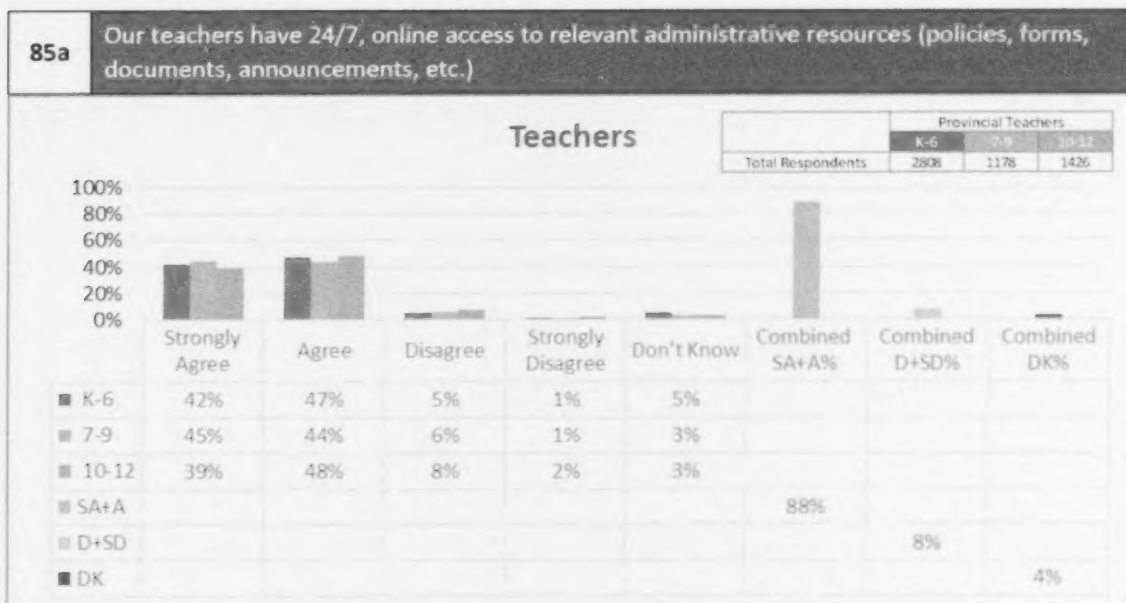
IT Leaders





E. Teacher Online 24/7 Access

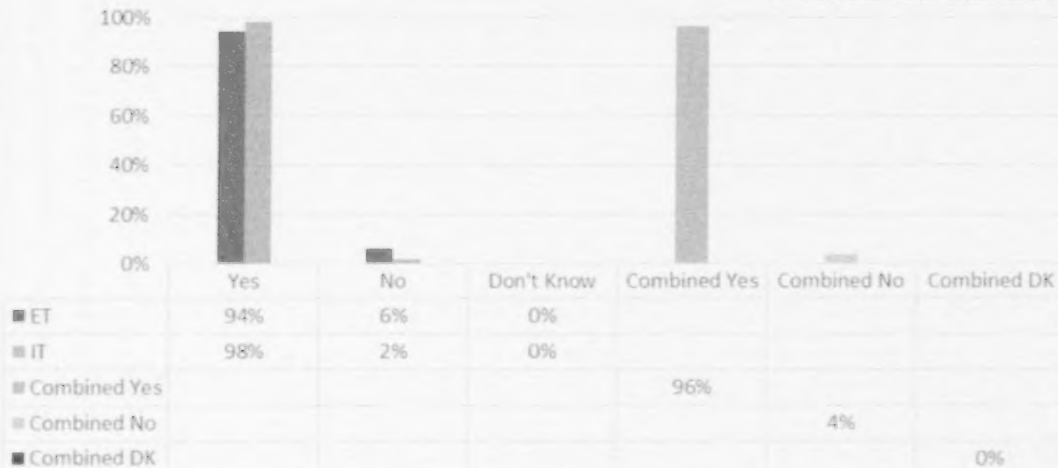
1. Access to Resources



85c

Our teachers have 24/7, online access to relevant administrative resources (policies, forms, documents, announcements, etc.)

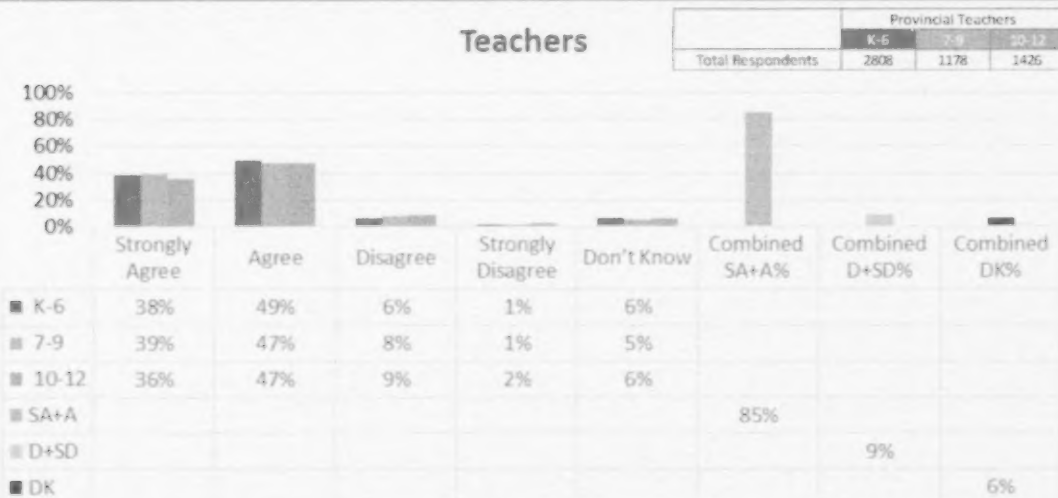
ET/IT Leaders



85d

Our teachers have 24/7, online access to digital curriculum resources.

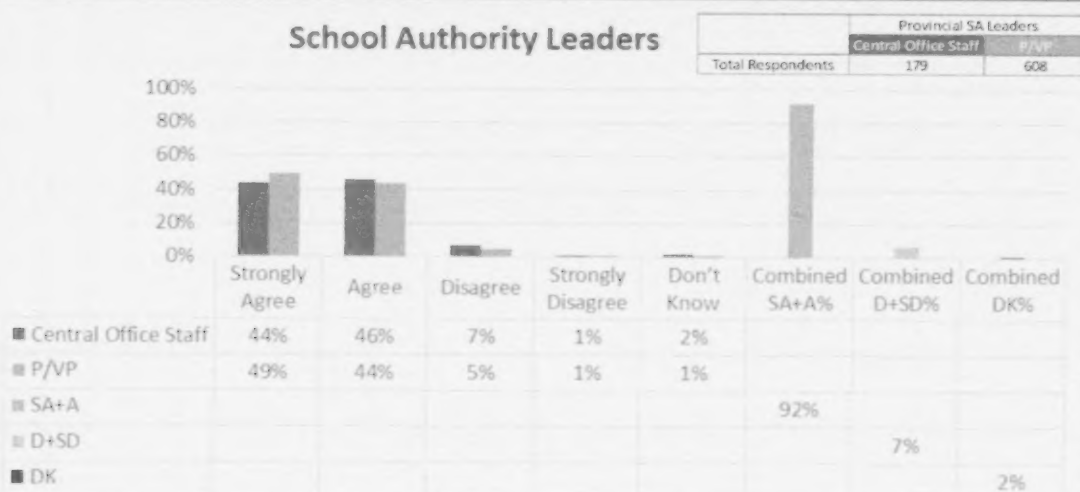
Teachers





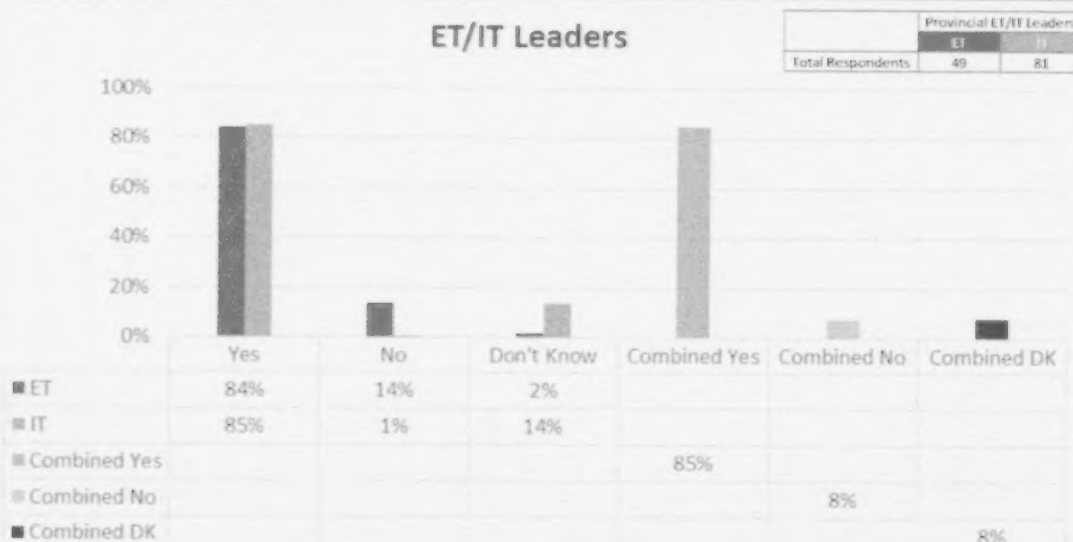
85e Our teachers have 24/7, online access to digital curriculum resources.

School Authority Leaders



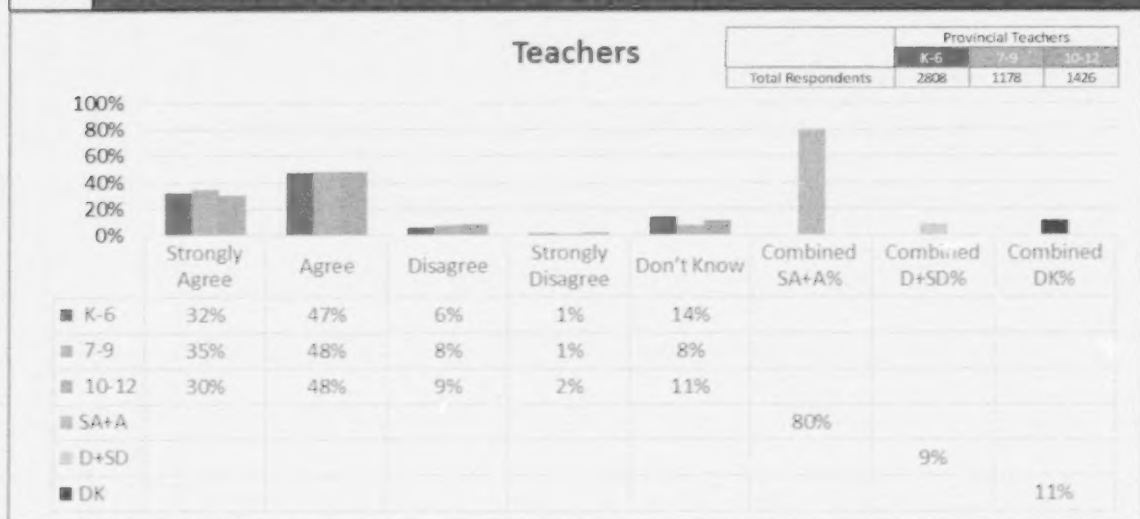
85f Our teachers have 24/7, online access to digital curriculum resources.

ET/IT Leaders

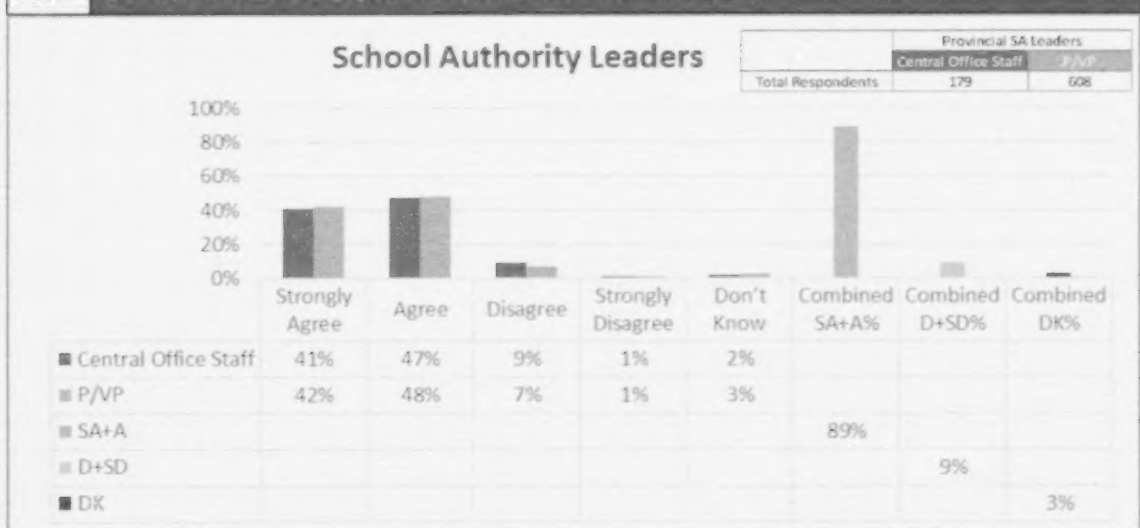




85g Our teachers have 24/7, online access to collaboration tools.

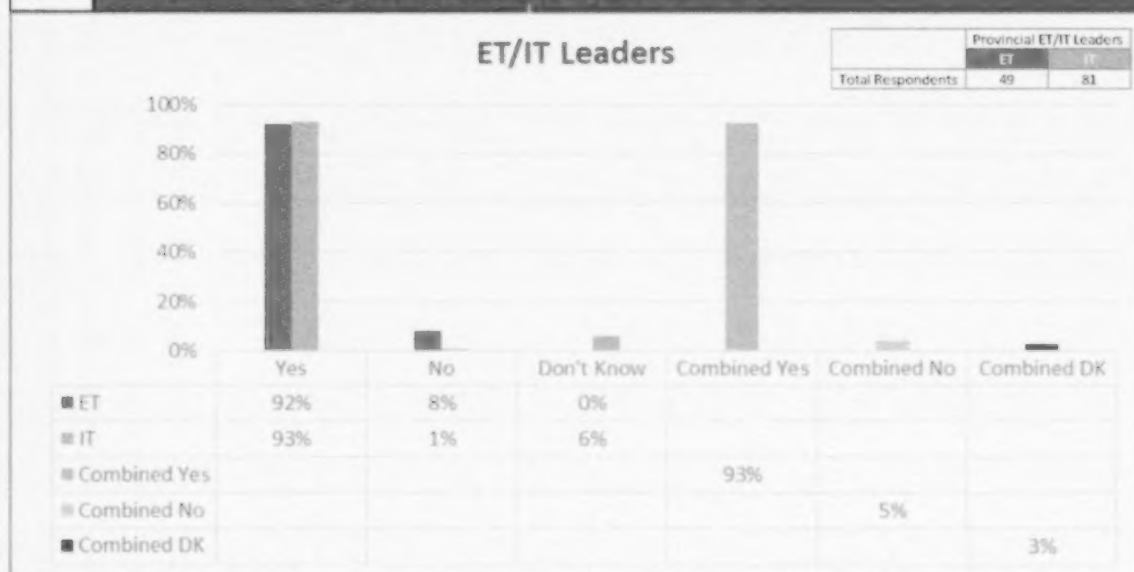


85h Our teachers have 24/7, online access to collaboration tools.



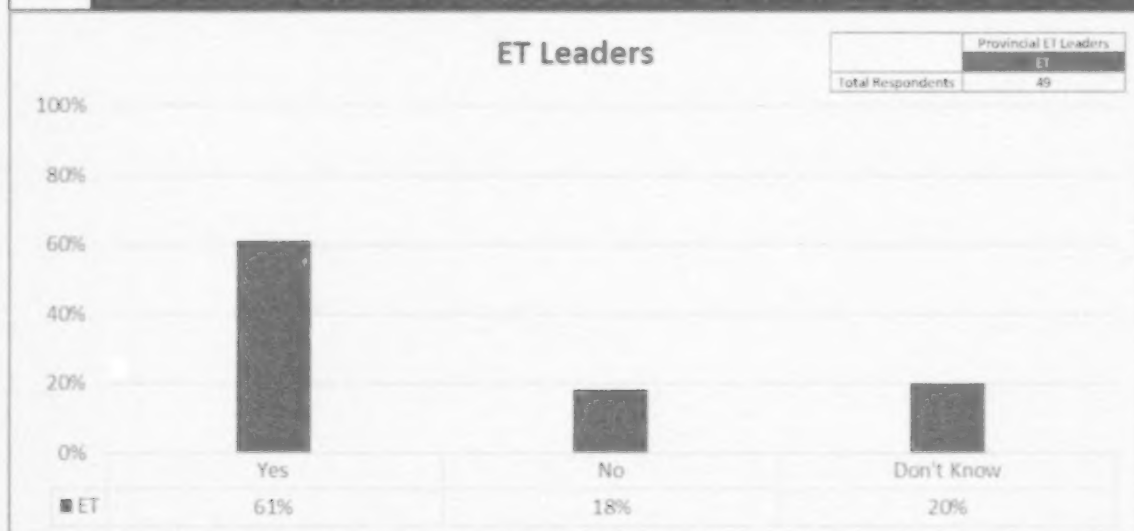


85i Our teachers have 24/7, online access to collaboration tools.



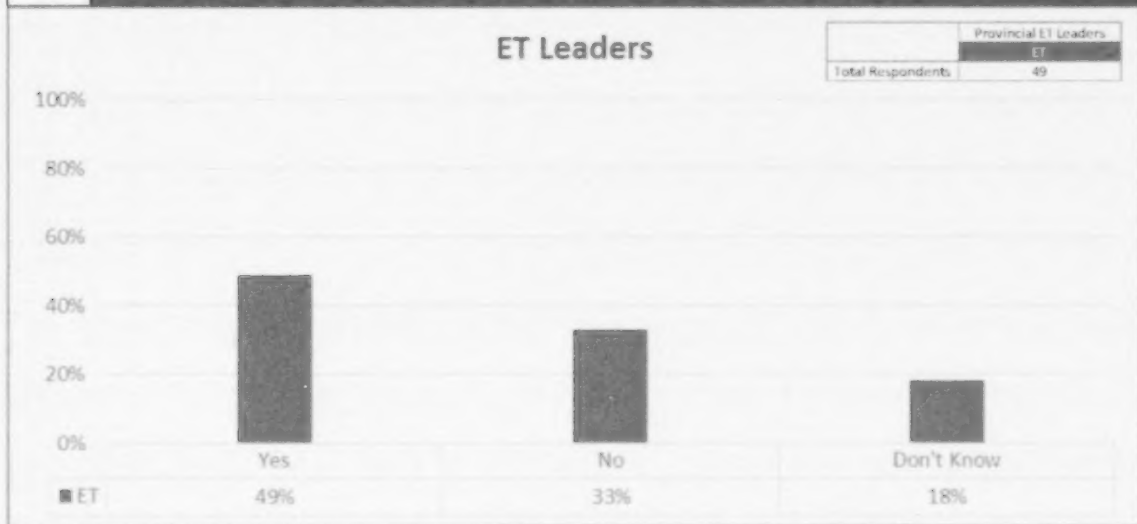
2. Access to School Authority Provided Resources

86a Our school authority provides 24/7, digital access to relevant curriculum based digital resources that are aligned to Ministry Outcomes



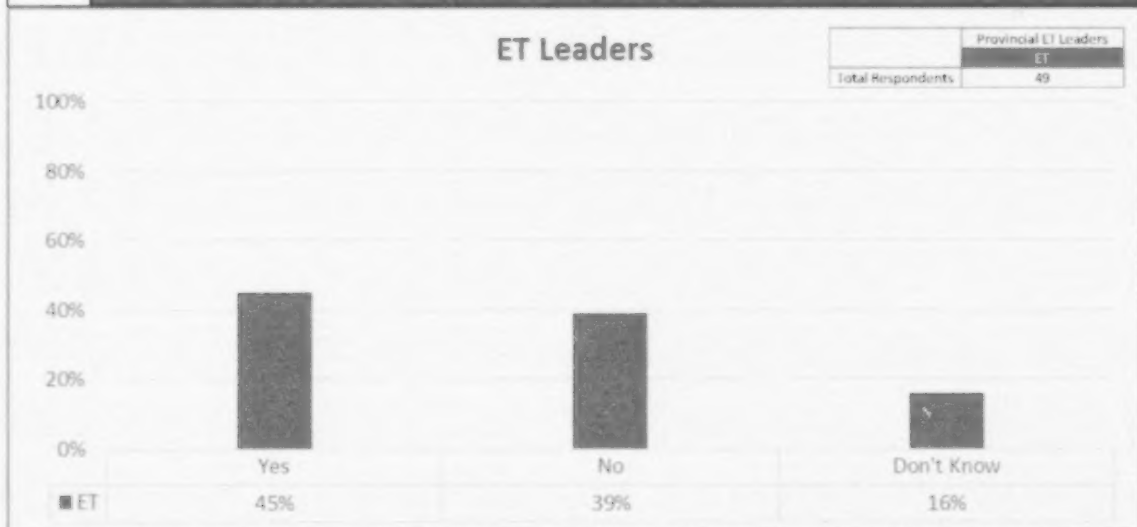
86b

Our school authority provides 24/7, digital access to relevant curriculum based digital resources that are easily searched by Outcomes, subject area, grade, keyword



86c

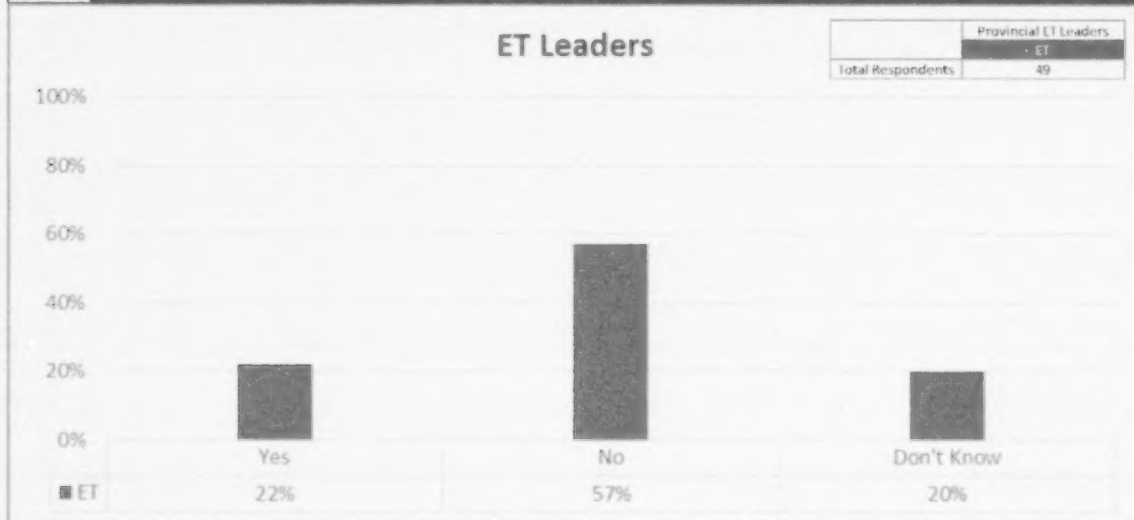
Our school authority provides 24/7, digital access to relevant curriculum based digital resources that have been vetted by authority staff





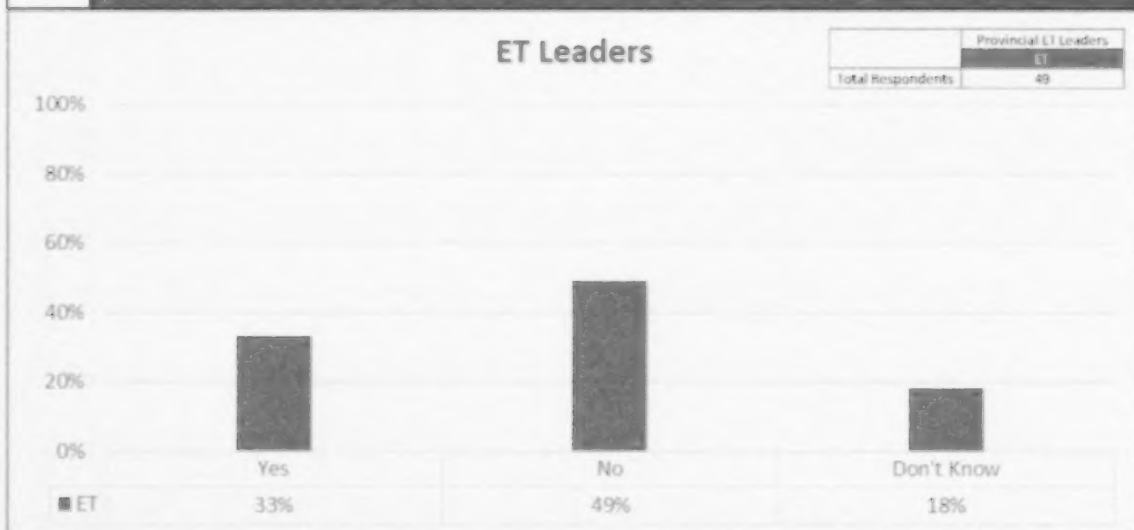
86d

Our school authority provides 24/7, digital access to relevant curriculum based digital resources that can be ranked scored or voted on by teachers



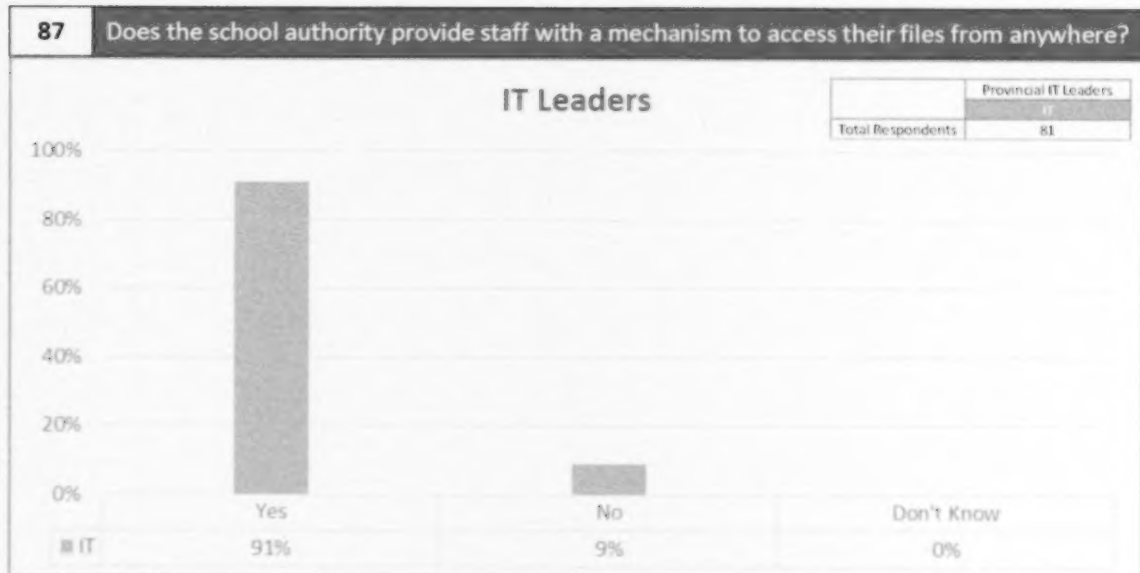
86e

Our school authority provides 24/7, digital access to relevant curriculum based digital resources that can be discussed/commented on



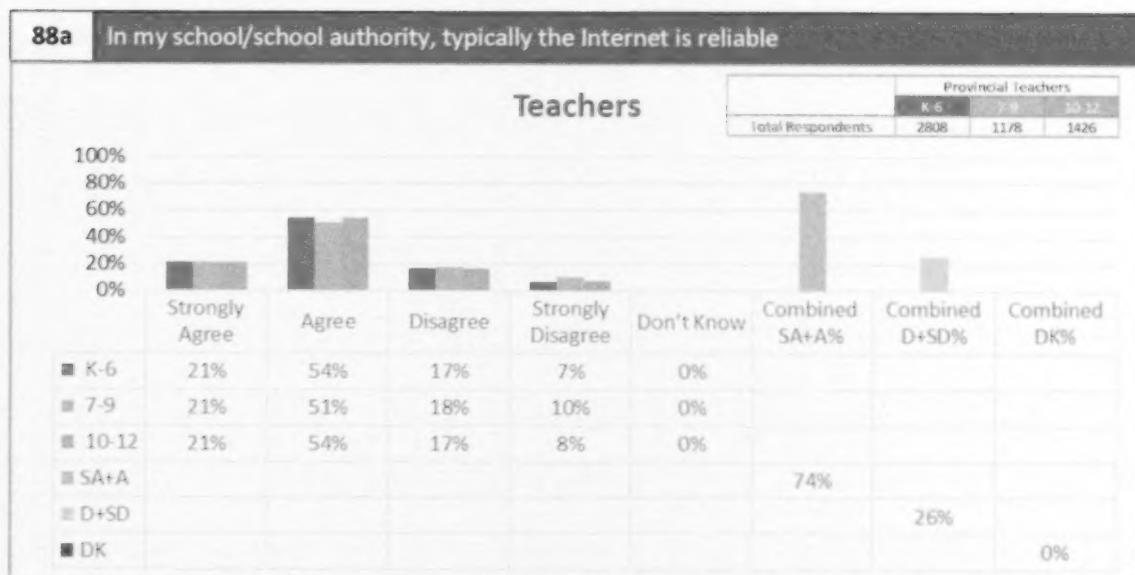


3. Access to Files from Anywhere



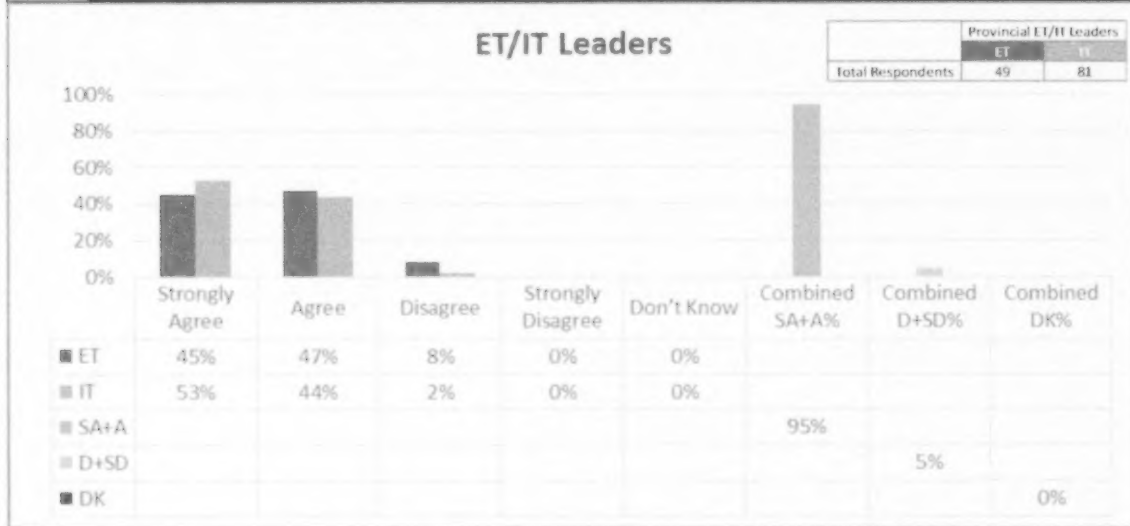
F. Internet Access for Staff and Students

1. Reliability:



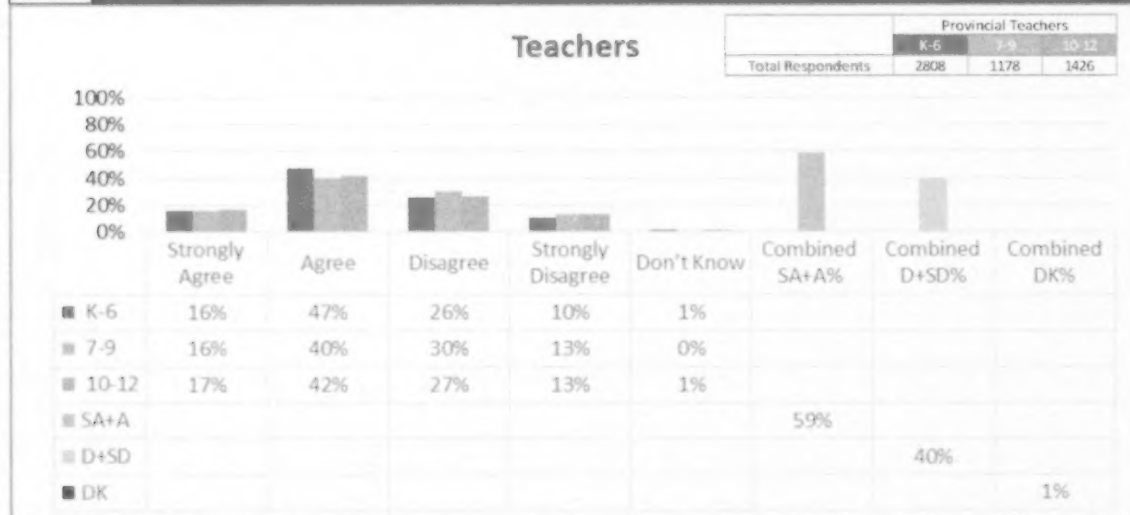


88b In my school/school authority, typically the Internet is reliable



2. Speed for Student Needs:

89a In my school/school authority, the Internet speed is adequate for the needs of my/our students

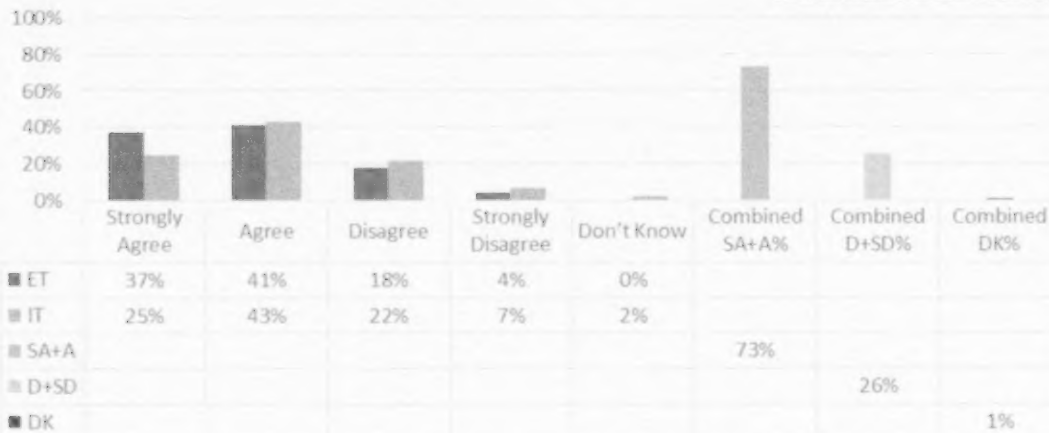


89b

In my school/school authority, the Internet speed is adequate for the needs of my/our students

ET/IT Leaders

	Provincial ET/IT Leaders	
	ET	IT
Total Respondents	49	81



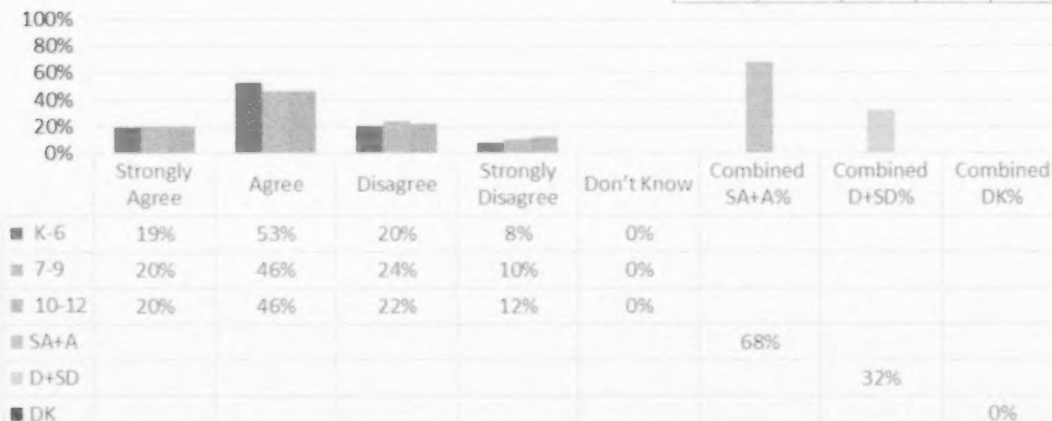
3. Speed for Teacher Needs:

89c

In my school/school authority, the Internet speed is adequate for my needs as a teacher/ET/IT Leader

Teachers

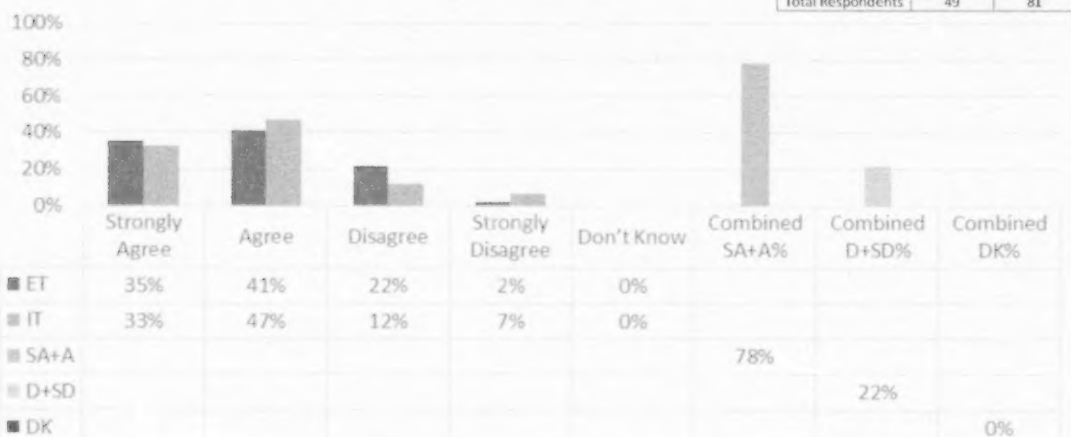
	Provincial Teachers		
	K-6	7-9	10-12
Total Respondents	2808	1178	1426



89d

In my school/school authority, the Internet speed is adequate for my needs as a teacher/ET/IT Leader

ET/IT Leaders



4. Teacher Access to Internet Sites:

90a

In my school/school authority, I/teachers am/are able to get to the Internet sites that I/they need for my/their teaching

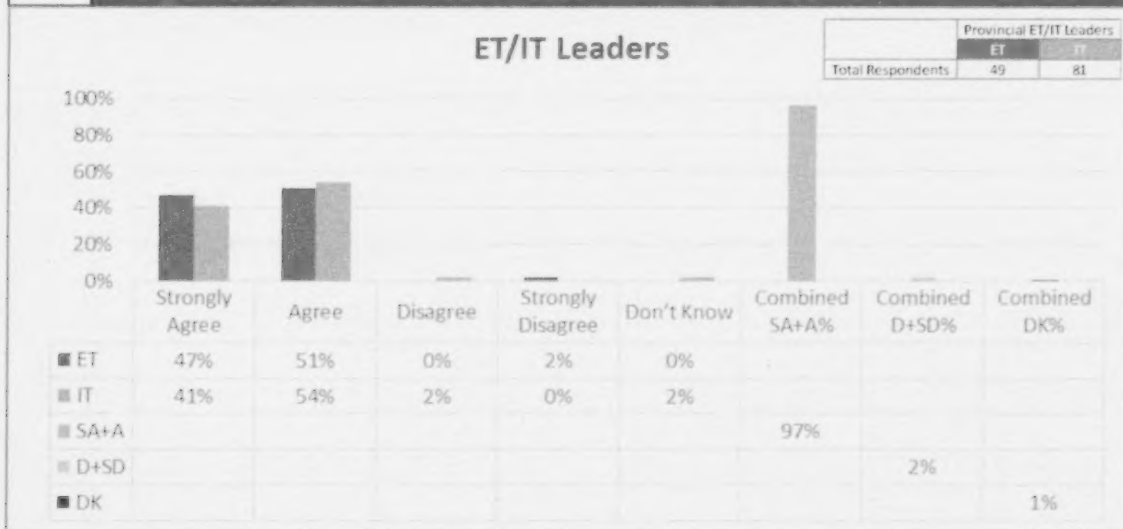
Teachers





90b

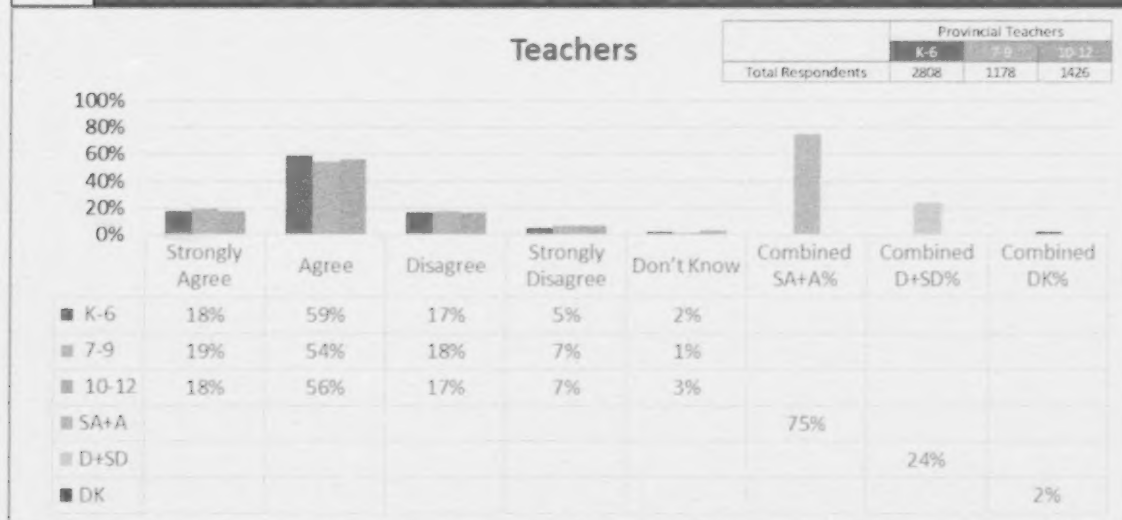
In my school/school authority, I/teachers am/are able to get to the Internet sites that I/they need for my/their teaching



5. Student Access to Internet Sites:

90c

In my school/school authority, students are able to get to the Internet sites that they need for their learning

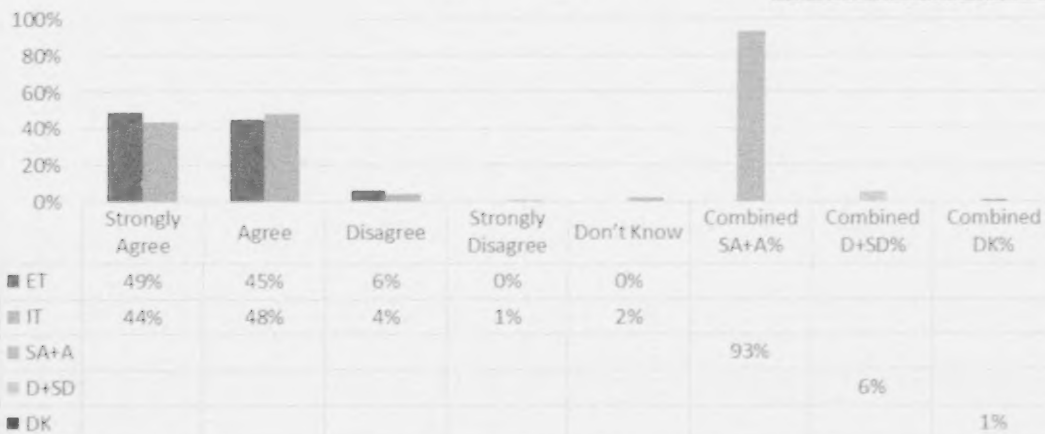




90d

In my school/school authority, students are able to get to the Internet sites that they need for their learning

ET/IT Leaders



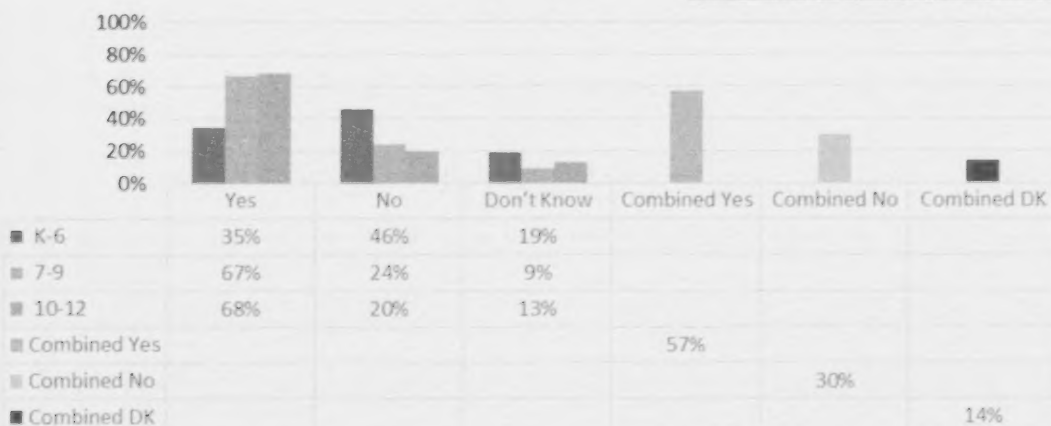
G. Bring Your Own Device

1. Student BYOD:

91a

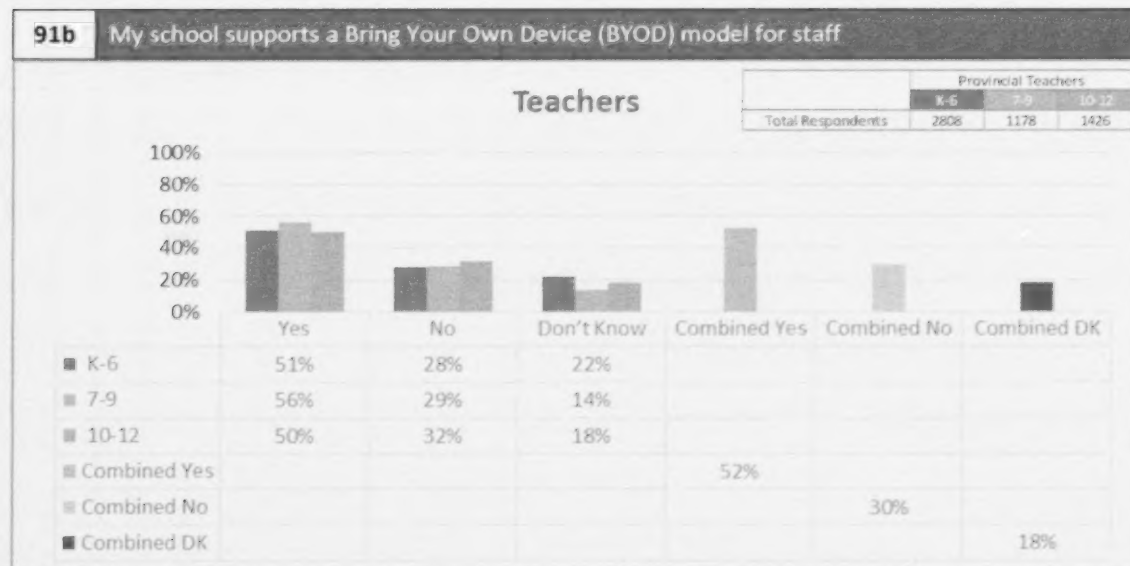
My school supports a Bring Your Own Device (BYOD) model for students

Teachers



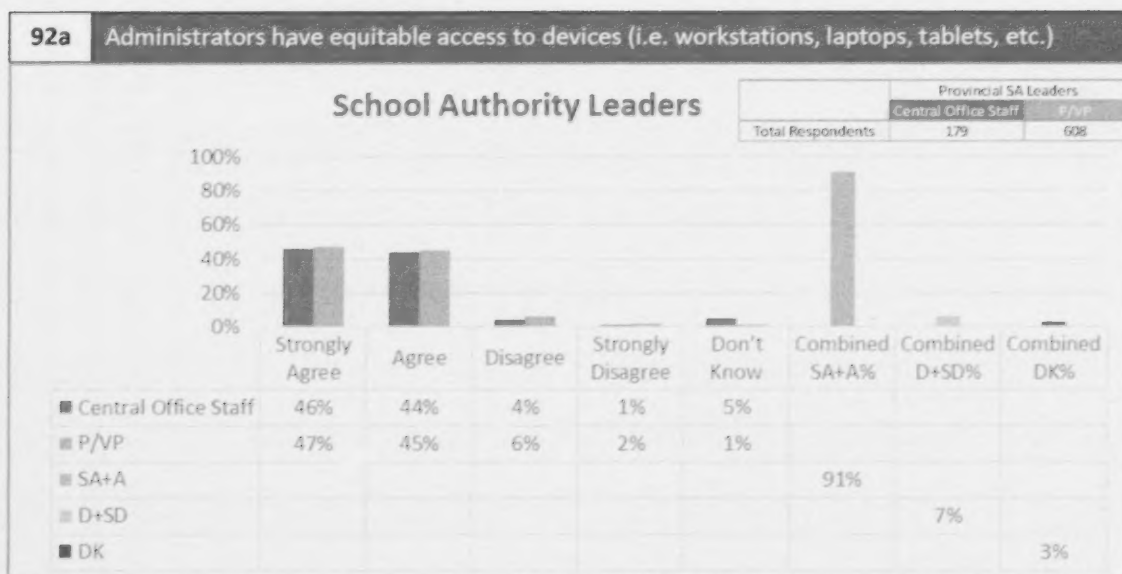


2. Staff BYOD



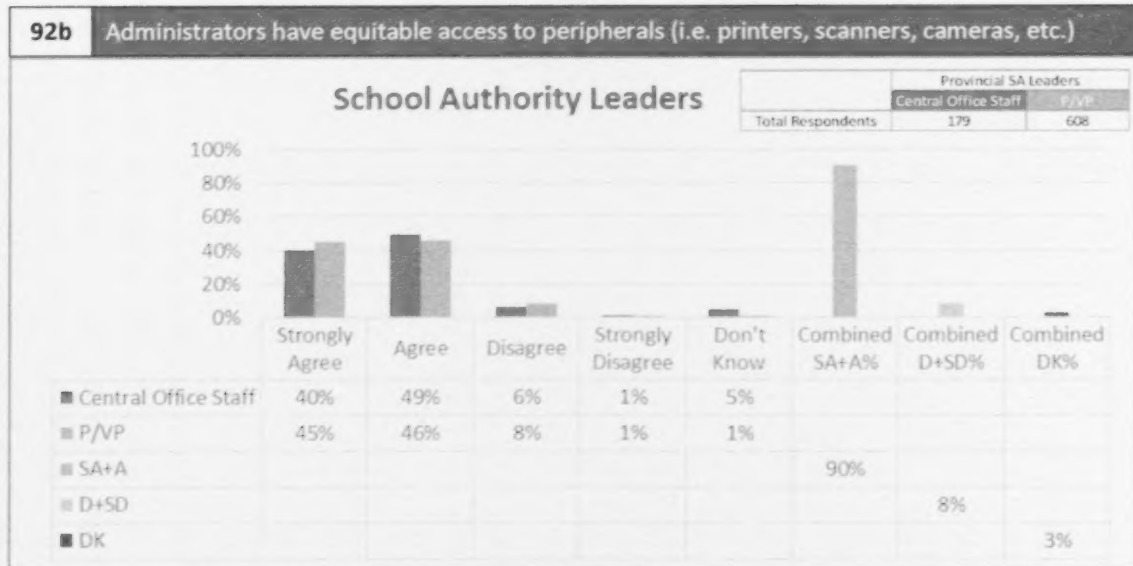
H. Administrator Access

1. Access to Devices:

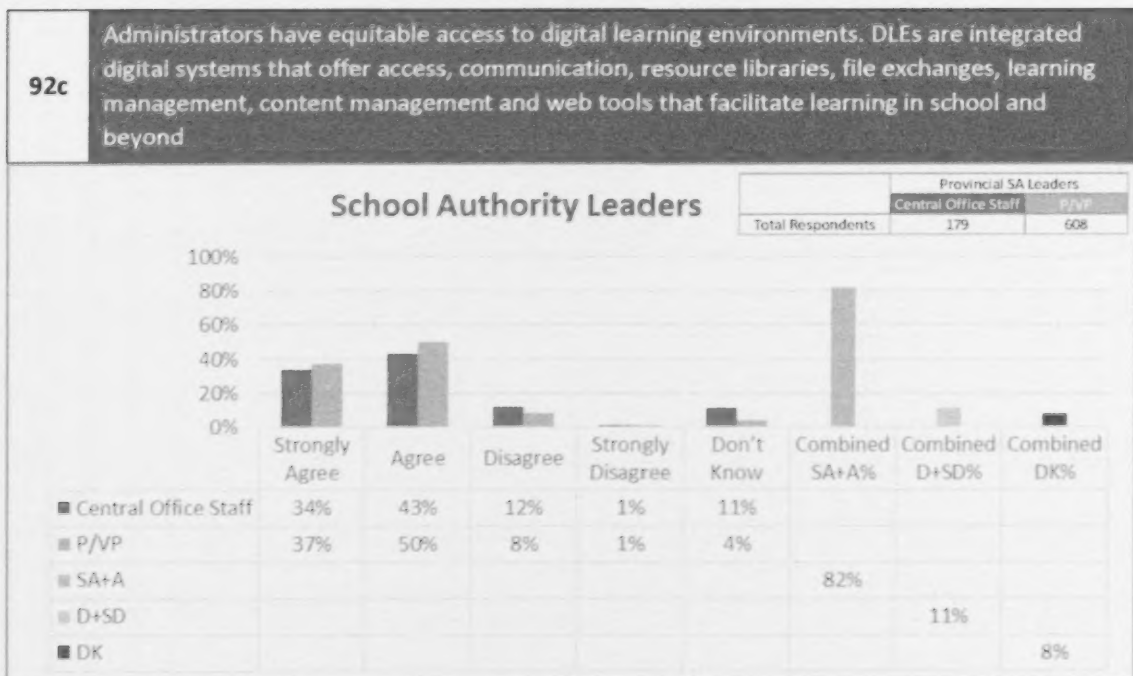




2. Access to Peripherals:

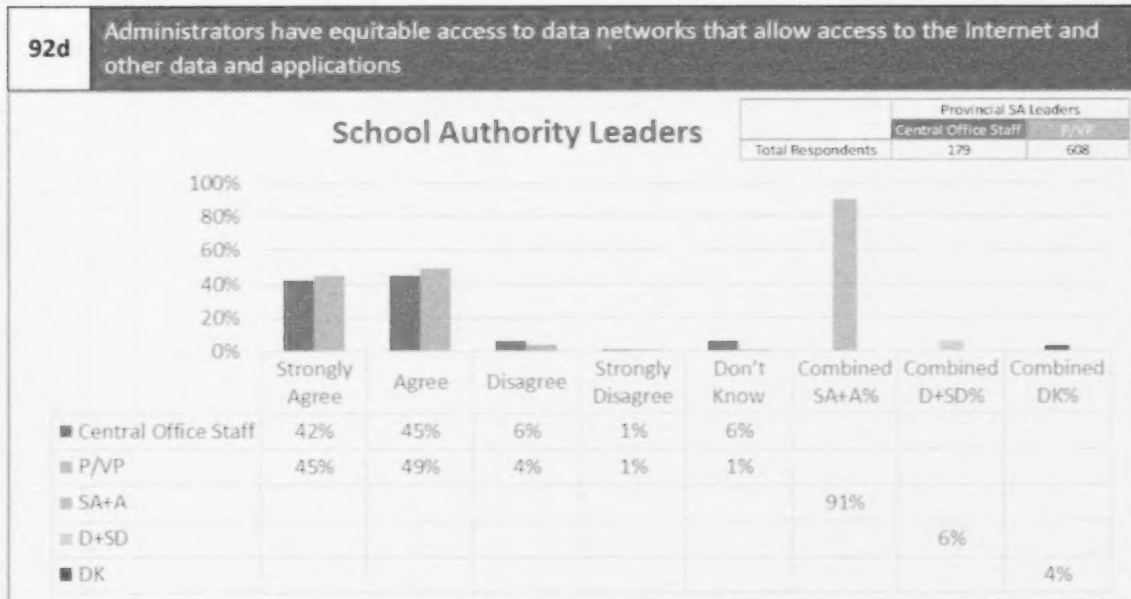


3. Access to Digital Learning Environments:



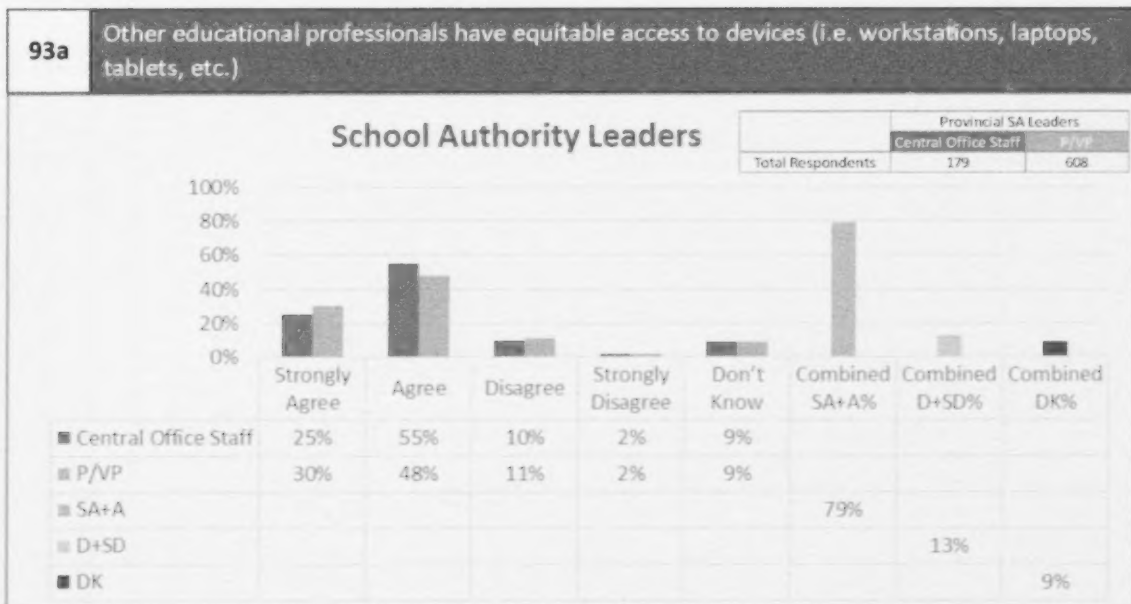


4. Access to Data Networks:



I. Other Professionals' Access

1. Access to Devices:

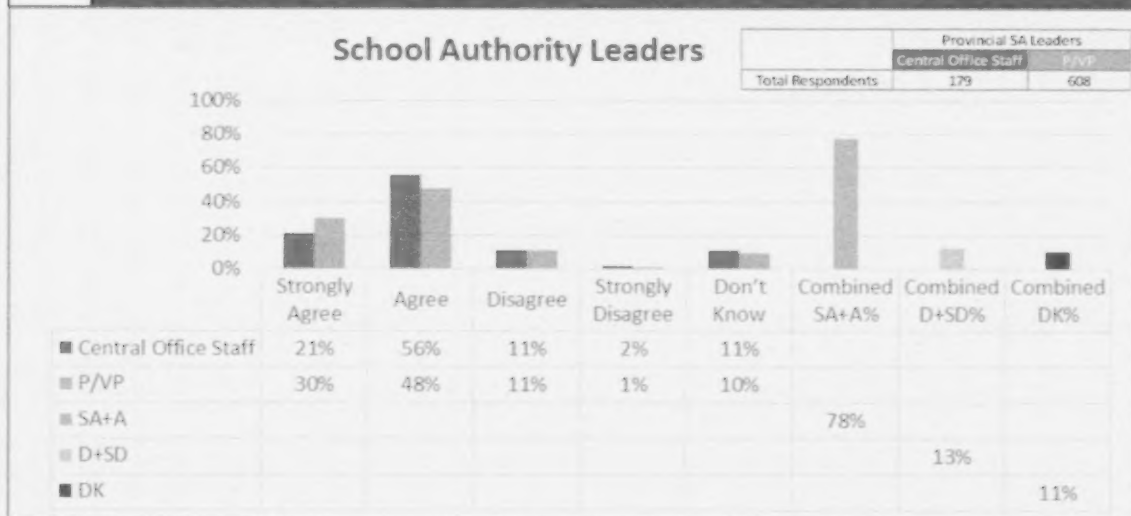




2. Access to Peripherals:

93b

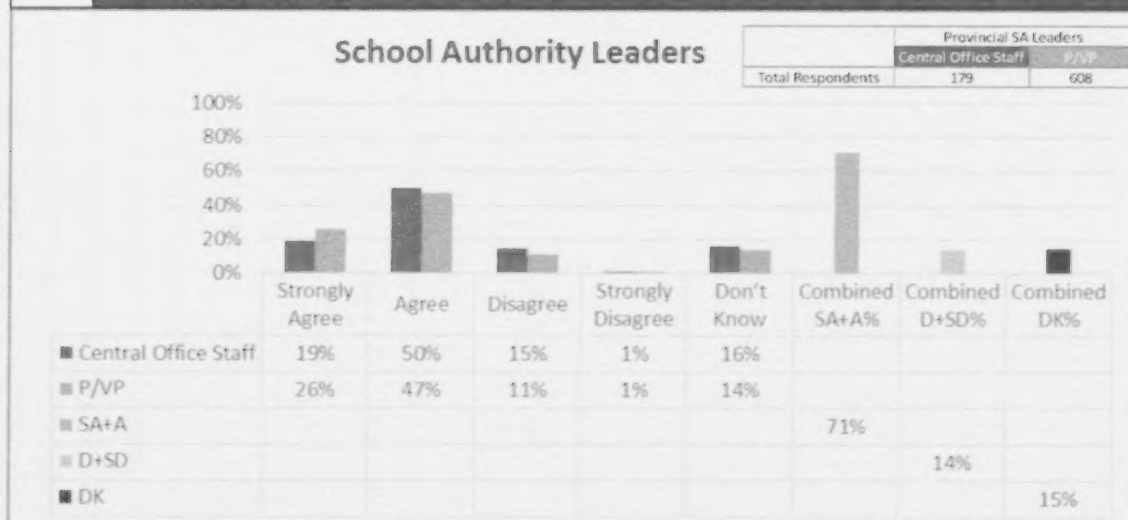
Other educational professionals have equitable access to peripherals (i.e. printers, scanners, cameras, etc.)



3. Access to Digital Learning Environments:

93c

Other educational professionals have equitable access to digital learning environments. DLEs are integrated digital systems that offer access, communication, resource libraries, file exchanges, learning management, content management and web tools that facilitate learning in school and beyond

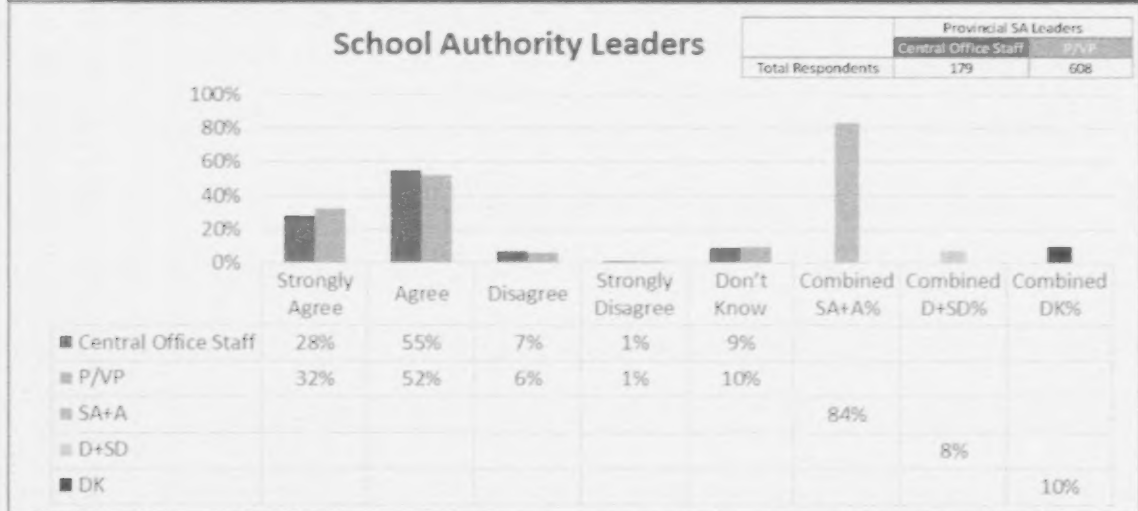




4. Access to Data Networks:

93d

Other educational professionals have equitable access to data networks that allow access to the Internet and other data and applications

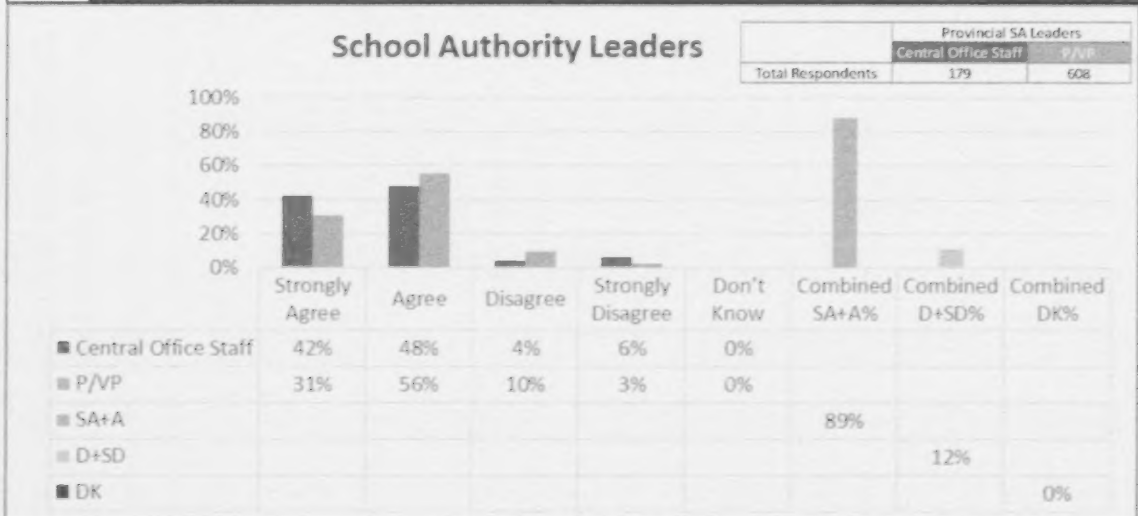


J. User Technical Support

1. School Authority Leaders

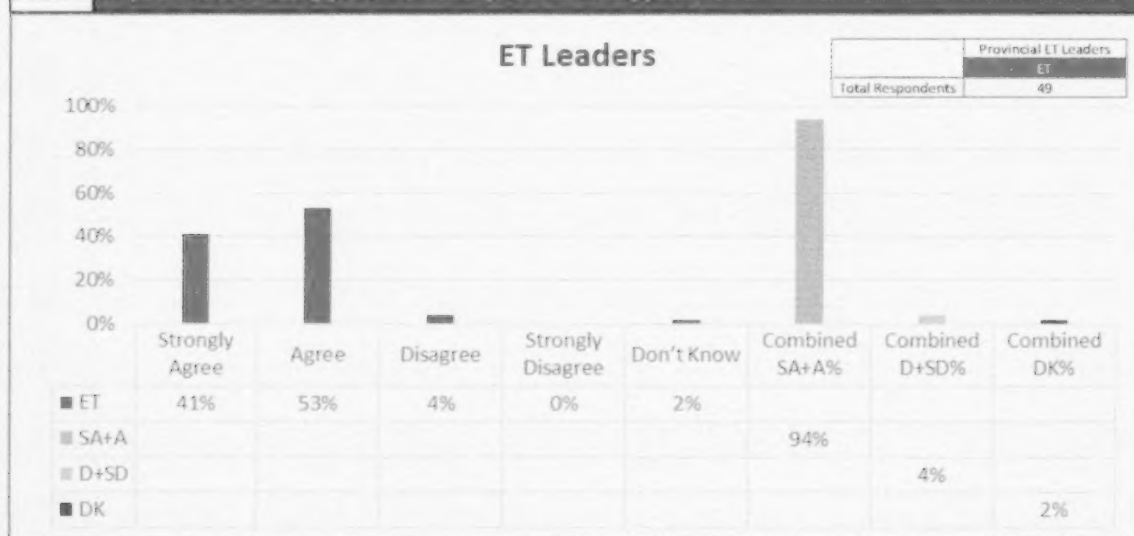
94a

I feel I get the technical support that I require to meet the requirements of my job.



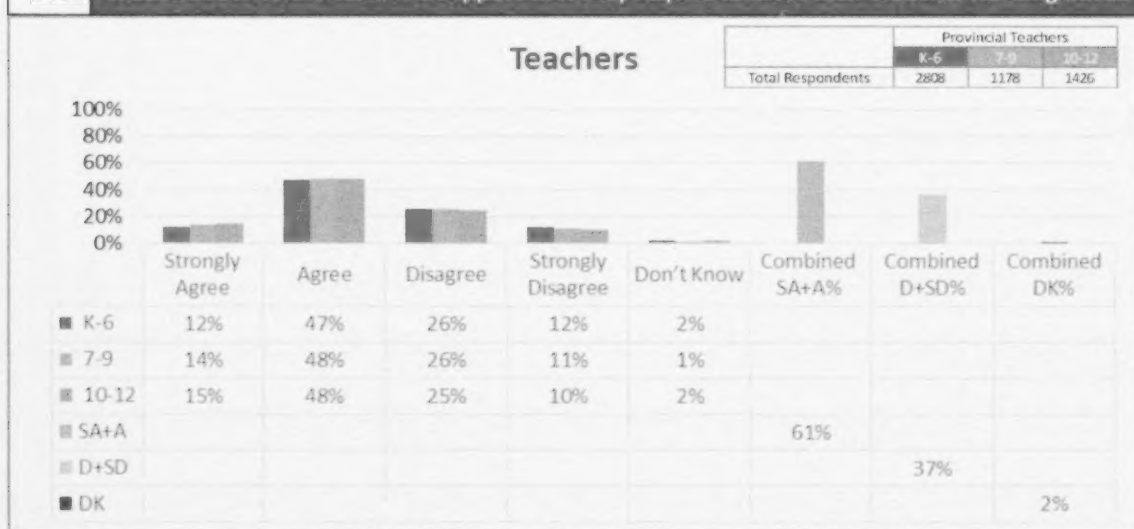


94b My school authority provides timely technical support



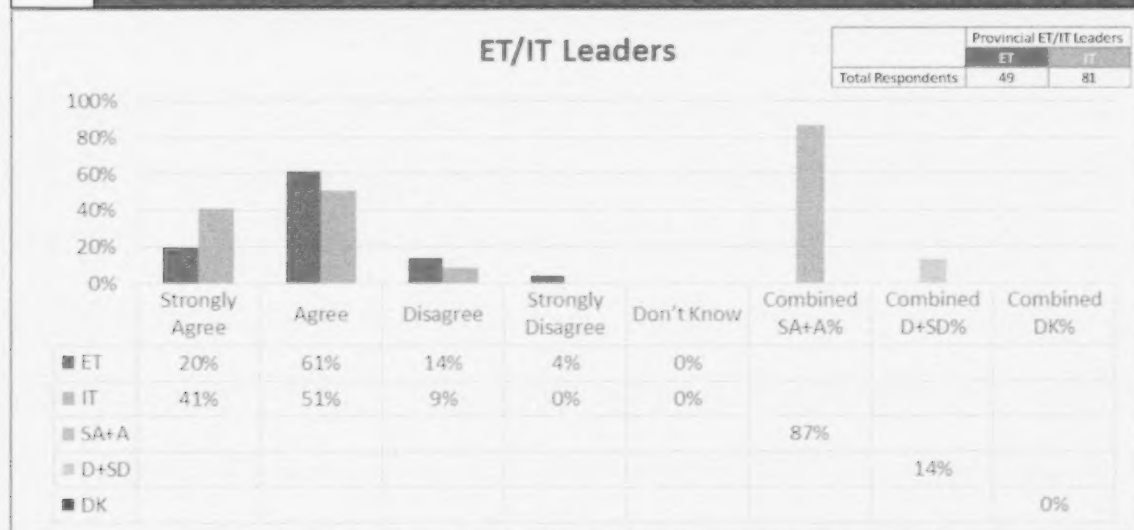
2. Teachers

94c Teachers receive the technical support that they require to meet their students learning needs



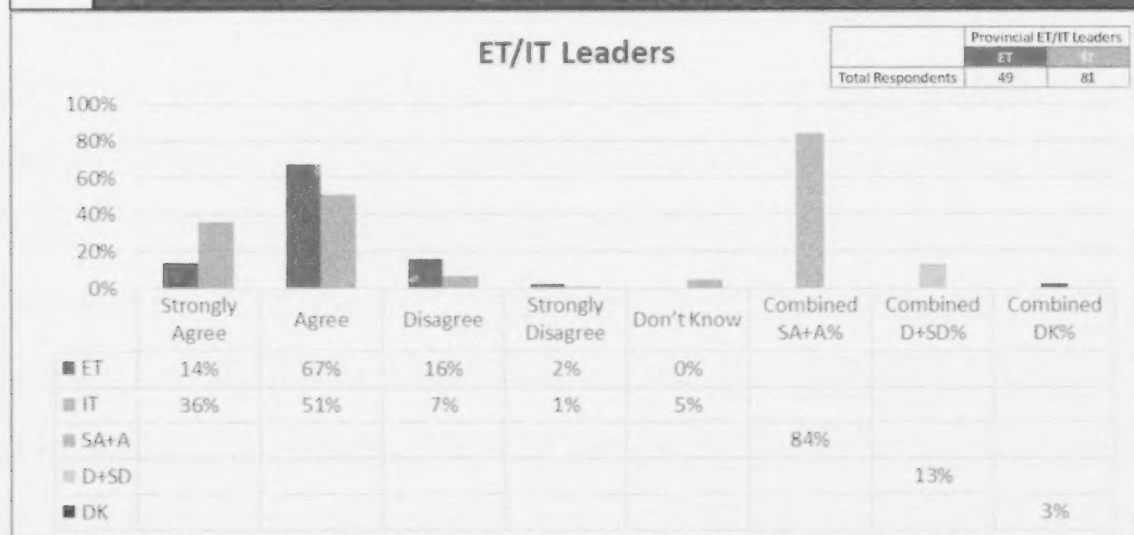


94d Teachers receive the technical support that they require to meet their students learning needs



3. Students

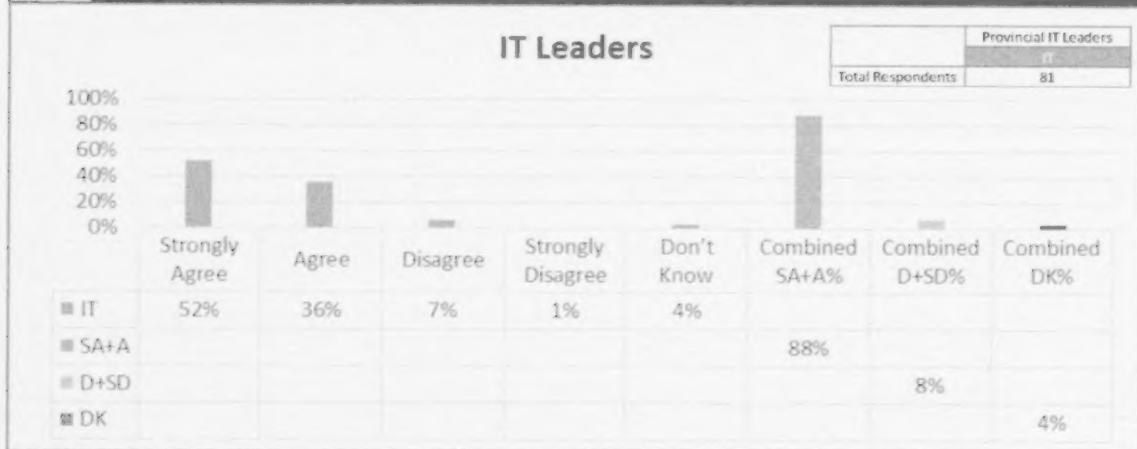
94e Students receive the technical support that they require to meet their learning needs:



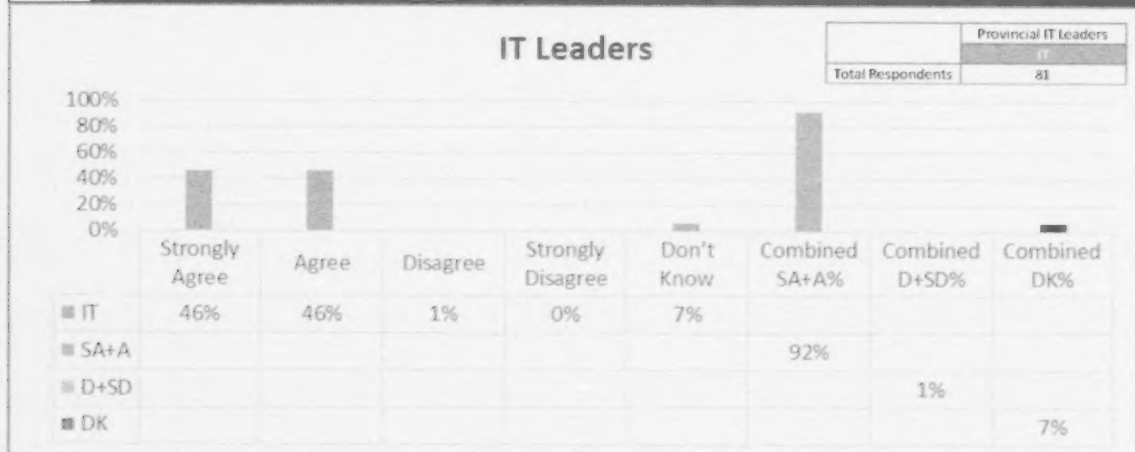
K. Alberta SuperNet

1. Reliability, Security, Value

95a In Alberta's education system the SuperNet is reliable



95b In Alberta's education system the SuperNet is secure



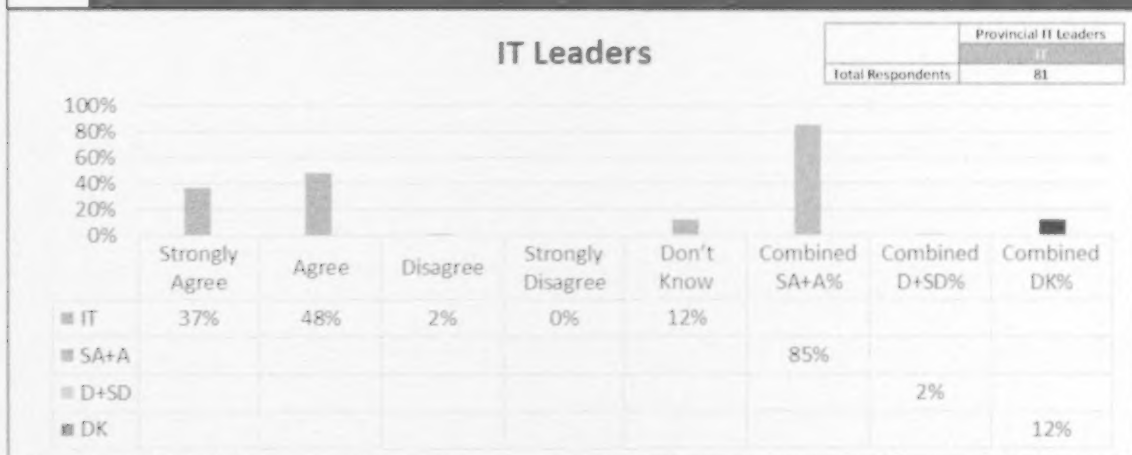


95c In Alberta's education system the SuperNet is valuable to my school authority



2. Interoperability

95d In Alberta's education system the SuperNet is interoperable

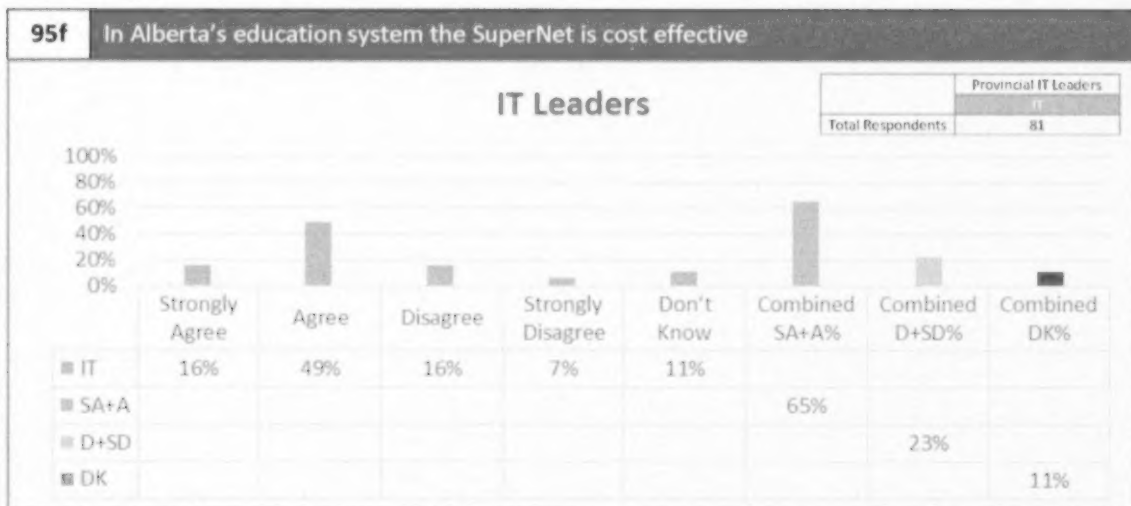




3. Governance

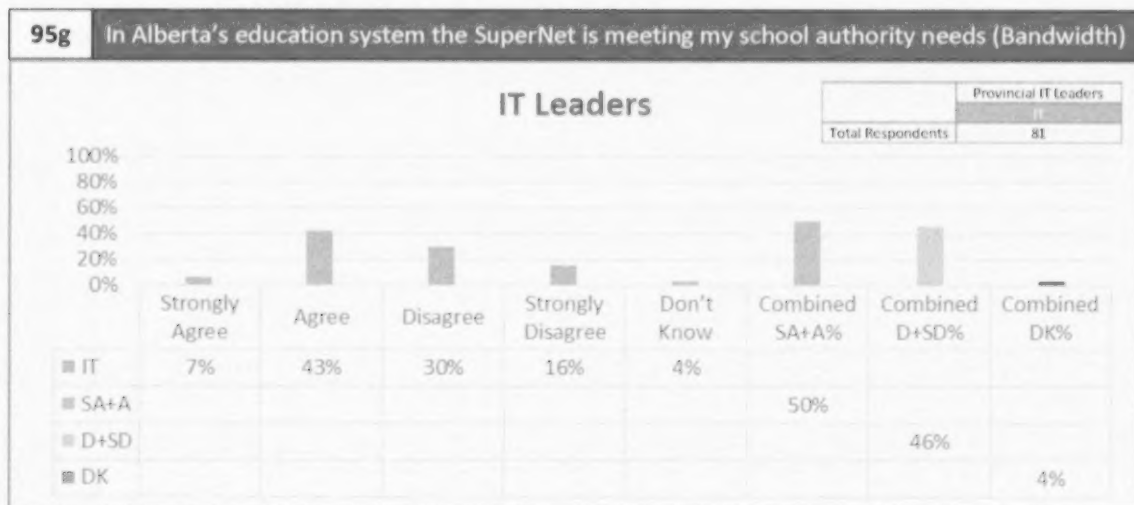


4. Cost Effectiveness

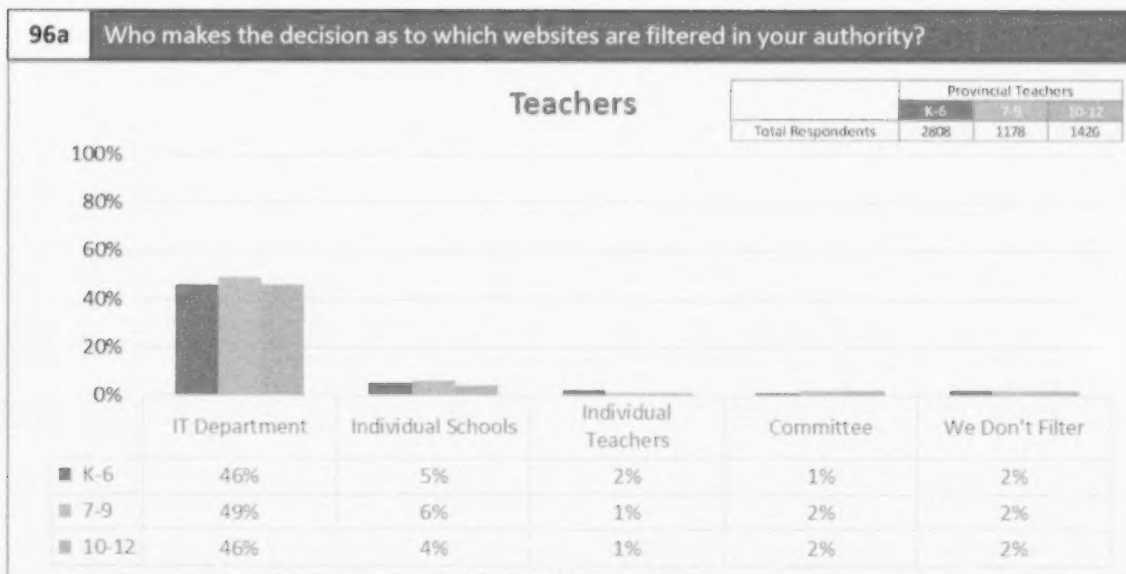




5. Meeting Bandwidth Needs



L. Web Site Filtering



Combined results for:

IT Department = 47%

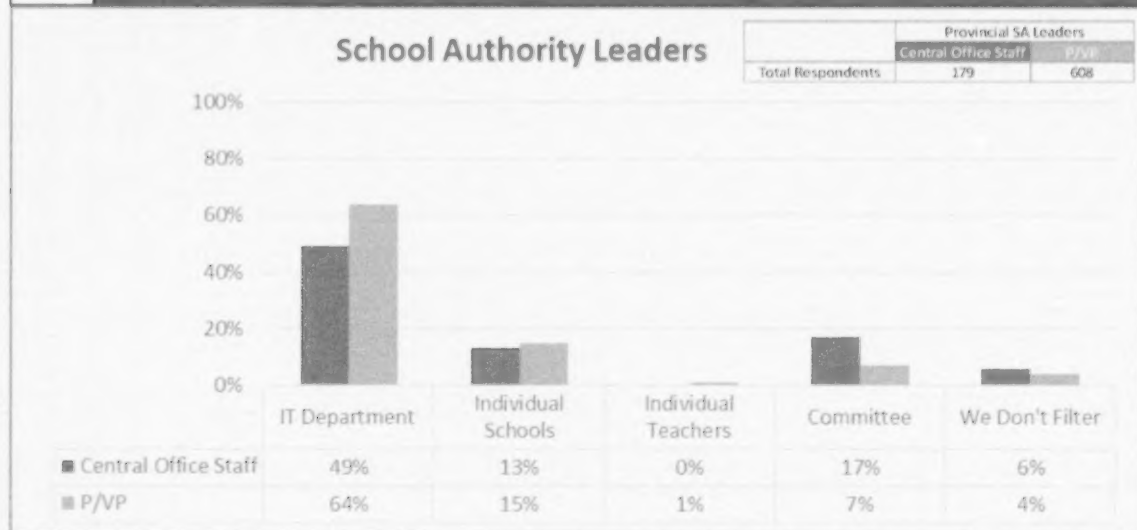
Individual Schools = 5%

Individual Teachers = 1%

Committee = 2%

We Don't Filter = 2%

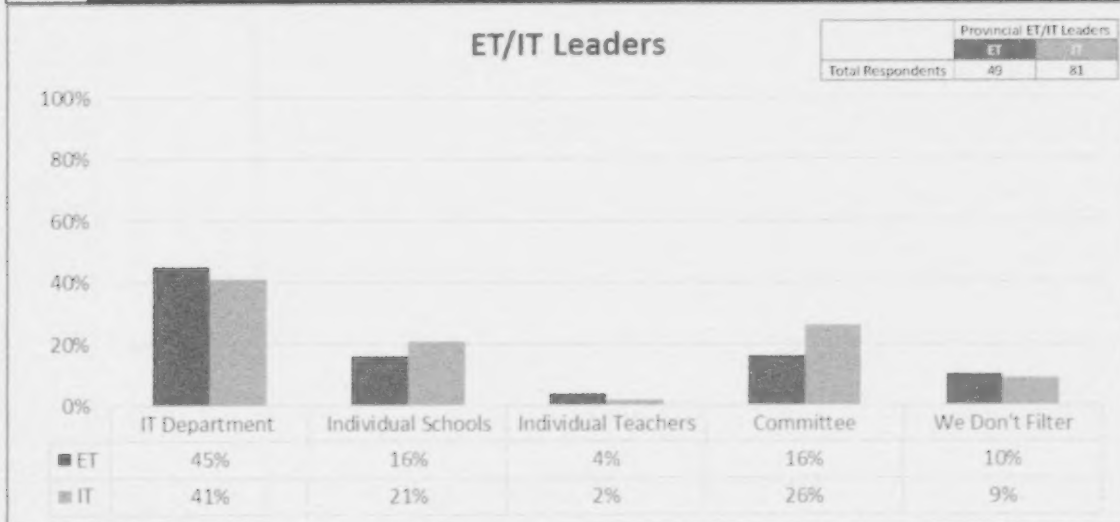
96b Who makes the decision as to which websites are filtered in your authority?



Combined results for
 IT Department = 57%
 Individual Schools = 14%
 Individual Teachers = 1%
 Committee = 12%
 We Don't Filter = 5%



96c Who makes the decision as to which websites are filtered in your authority?



Combined results for:

IT Department = 43%

Individual Schools = 19%

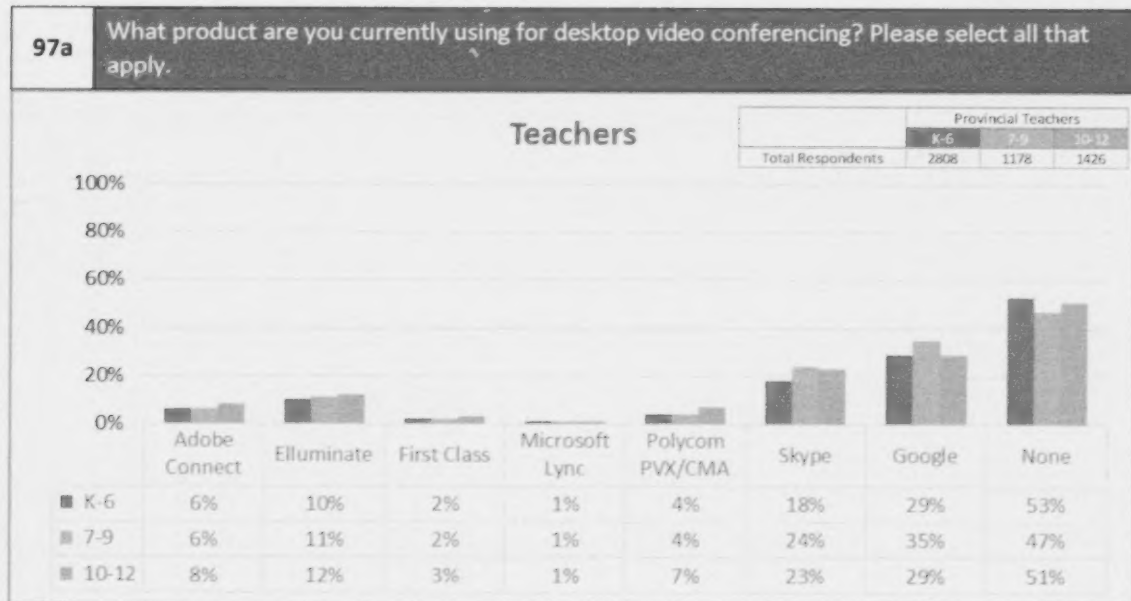
Individual Teachers = 3%

Committee = 21%

We Don't Filter = 10%



M. Video Conferencing and Collaboration

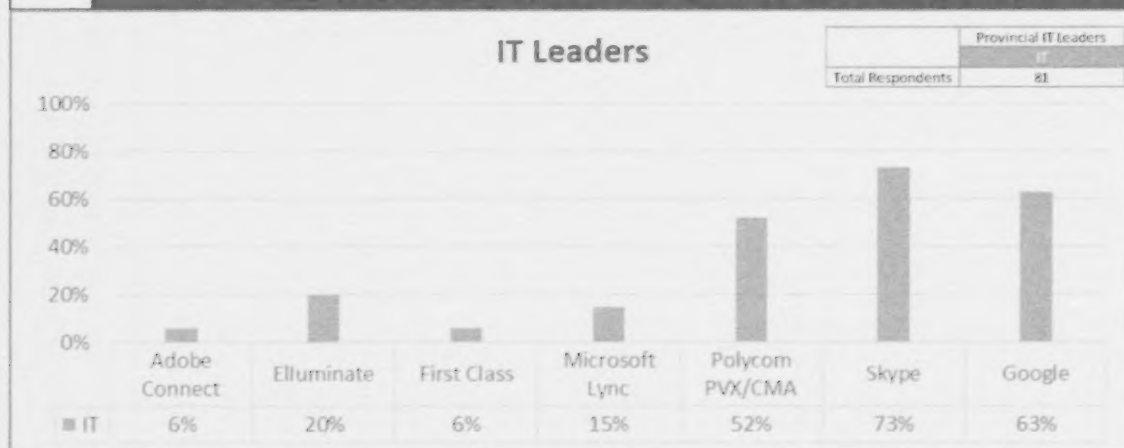


Combined results for
 Adobe Connect = 7%
 Elluminate = 11%
 First Class = 2%
 Microsoft Lync = 1%
 Polycom PVX/CMA = 5
 Skype = 22%
 Google = 31%
 None = 50%



97b

What product are you currently using for desktop video conferencing? Please select all that apply.



"Other" Video Conferencing responses from:

K-6 Teachers	7-9 Teachers	10-12 Teachers	IT Leaders
Don't Know/Haven't used it - 164	Don't know/Haven't used it - 75	Don't Know/Haven't used it - 75	Bridgit - 3
Facetime - 22	Not allowed/Blocked - 10	Facetime - 13	Don't know / None - 2
Not allowed/Blocked - 12	Facetime - 9	Bridgit - 11	Skype - 1
Skype - 9	Bridgit - 3	Blackboard - 9	Sony - 1
Blackboard - 8	Elluminate - 3	Not allowed/Blocked - 6	Cisco jabber - 1
Bridgit - 6	Skype - 2	Skype - 5	Google Hangouts - 1
Elluminate - 5	Blackboard - 1	Big Blue Button - Moodle - 5	Polycom - 1
Microsoft Lync - 4	D2L - 1	Microsoft Lync - 3	iChat - 1
Google - 2	Google - 1	Elluminate - 2	Facetime - 1
Go-to-Meeting - 1	Microsoft LiveCam - 1	VROC - 2	Lifesixe - 1
Big Blue Button - Moodle - 1	Collaborate - 1	Rhino - 2	
iChat - 1	Go-to-Meeting - 1	D2L - 1	
Glogstar - 1	Microsoft Media Player - 1	Collaborate - 1	
Edmodo - 1		Go-to-Meeting - 1	
Cisco - 1		Notebook - 1	
WebEx - 1		Fusebox - 1	
Omnijoin - 1		Screen Cast-o-matic - 1	
		WixIQ - 1	
		PolyCom - 1	
		Vbuzz - 1	
		Trillian - 1	
		mIRC - 1	
		NimBuzz - 1	
		Pigdin - 1	
		X-Chat - 1	
		ICQ - 1	
		Miranda - 1	
		MSN Messenger - 1	



		Yahoo Messenger – 1 Google Hangouts – 1 ClearSea – 1 IChat – 1 WeChat – 1 iMessage – 1 Teacher Logic – 1	
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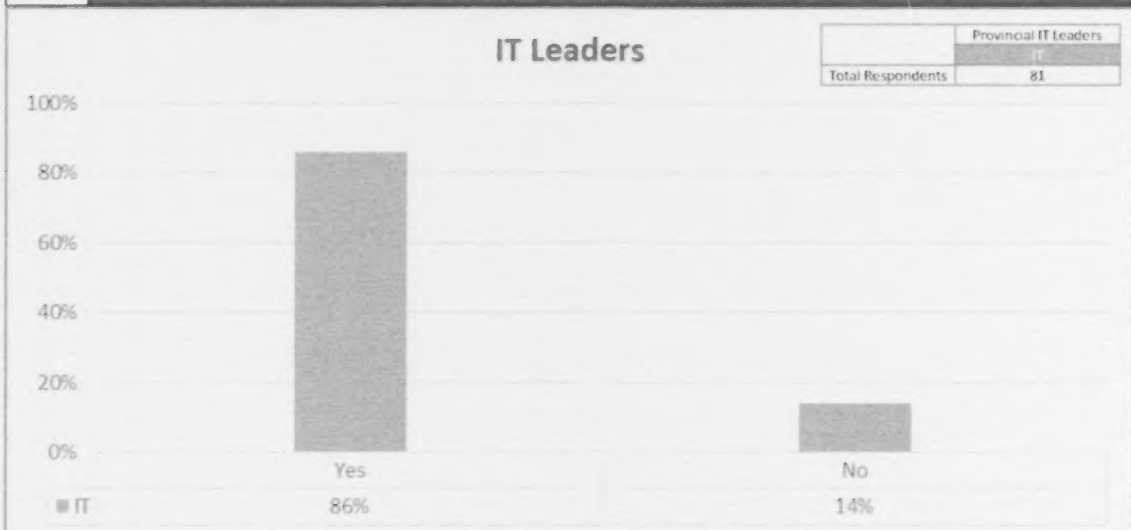
98

How many video conferencing systems does your school authority currently have that conform to the H.323 standard?



99

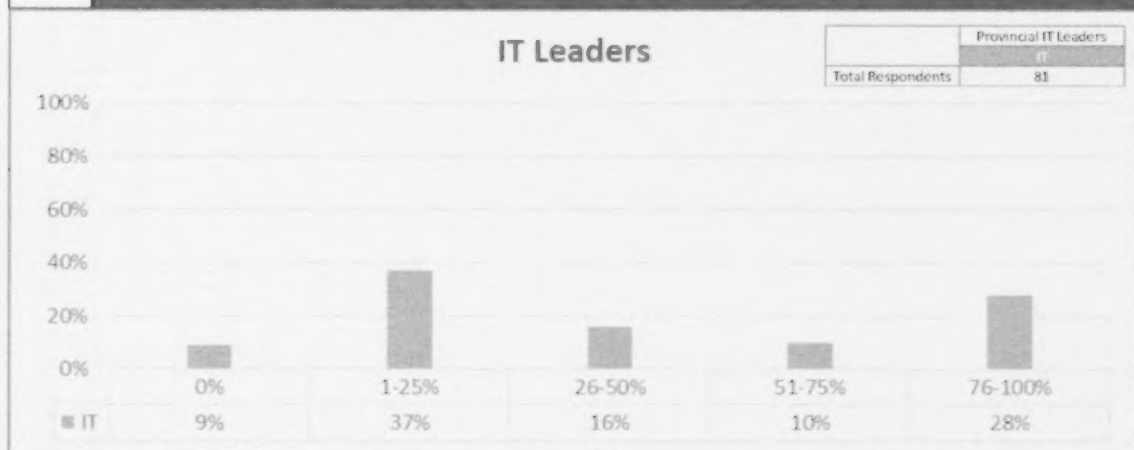
Is your school authority using desktop video conferencing software?





100

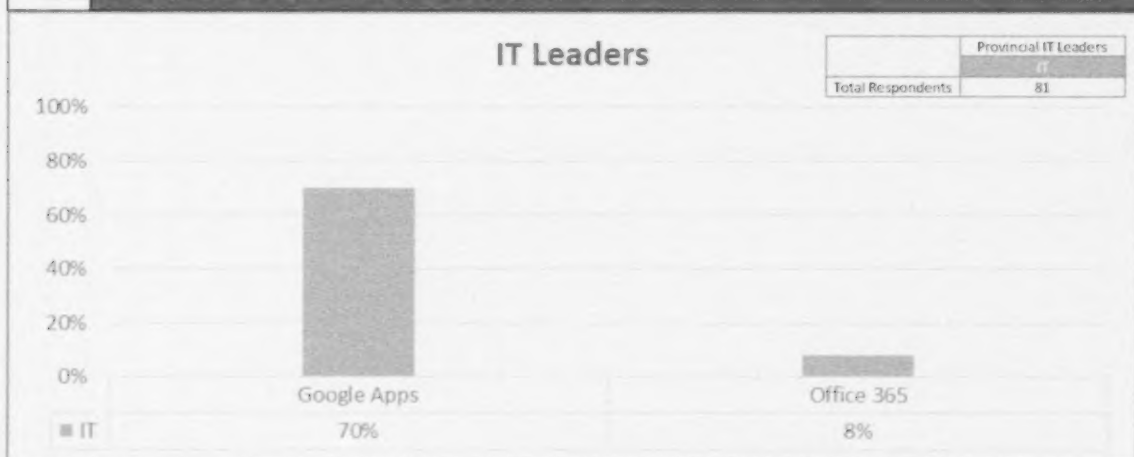
What percentage of the schools in your school authority are currently using desktop video conferencing software?



A. The Cloud

101

What percent of your schools are using?





B. Media Streaming



"Other" Responses:

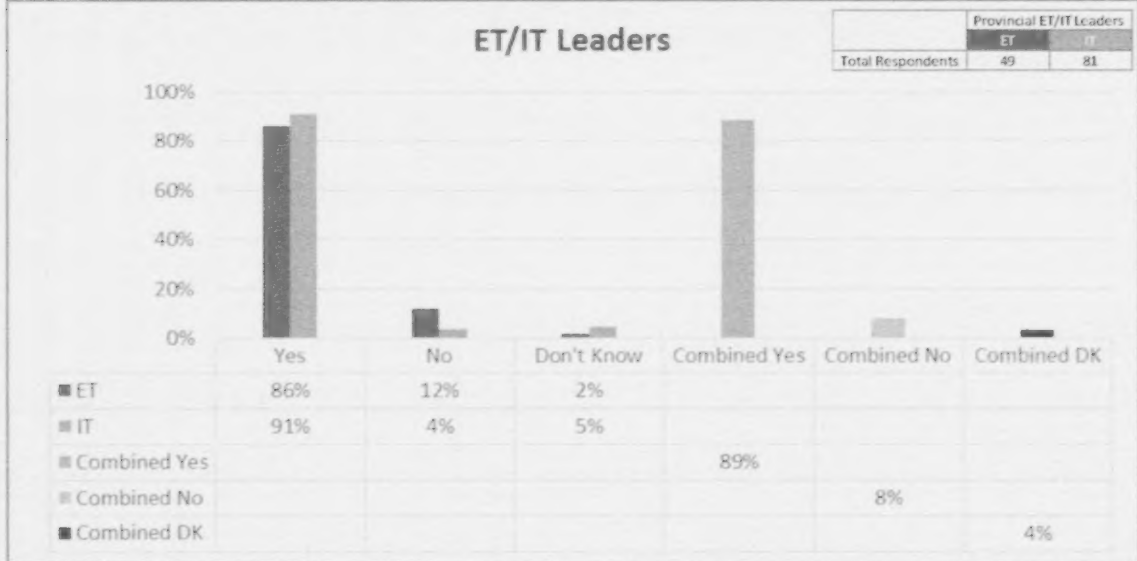
YouTube – 15
 LearnAlberta – 4
 I don't know / None – 2
 ITOU.tv – 2
 mage Learning – 1
 Apple TV – 1
 TFO Education – 1
 CDD servers – 1
 Teacher Tube – 1
 Network fileshare – 1
 Ensemble – 1
 Netflix - 1



C. Collaboration Tools

102

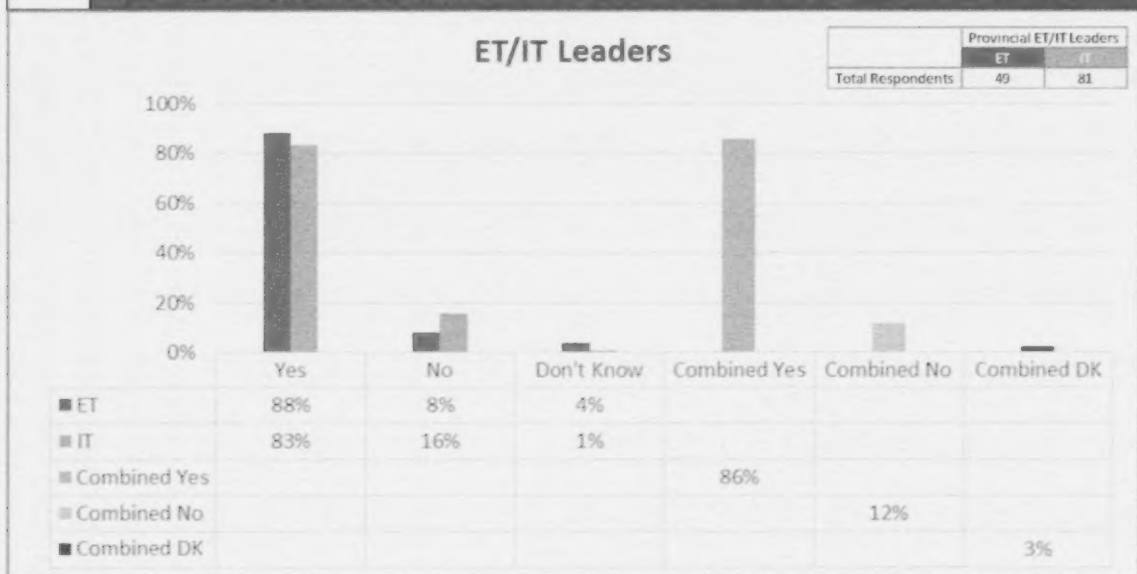
Does your school authority provide a mechanism to allow students and teachers to collaborate using technology?



D. IT Policies

103

My school authority has clear policies in place to ensure the proper use of technology, including security/privacy protection.





R. School Authority Owned Devices

104 For each of the following please indicate the total percentage of authority/school owned devices (Total must equal 100%):



S. Operating Systems

105 Please indicate the approximate percentage of computing devices in your school authority that run the following operating systems: Reminder that your answers must total 100 and use 0 where appropriate.



"Others" responses:

I don't know – 1
Vista 15% - 1
XP <1% - 1
Windows 7 – 1

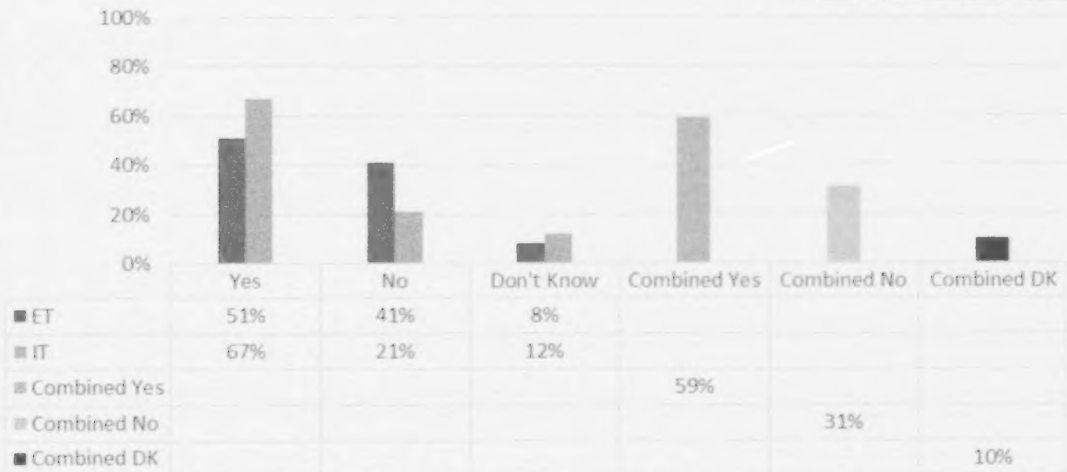


T. Education Standing Offers (ESO)

106a

Are you aware that Alberta Education has an Education Standing Offer (ESO) for inclusive Education Tools?

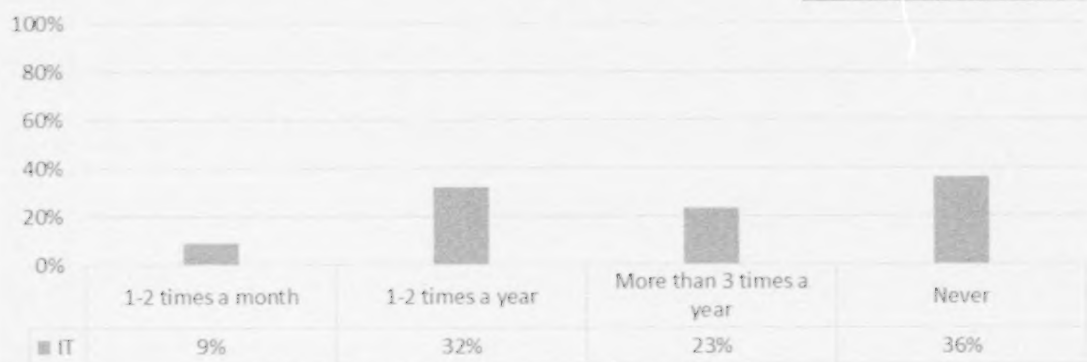
ET/IT Leaders



106b

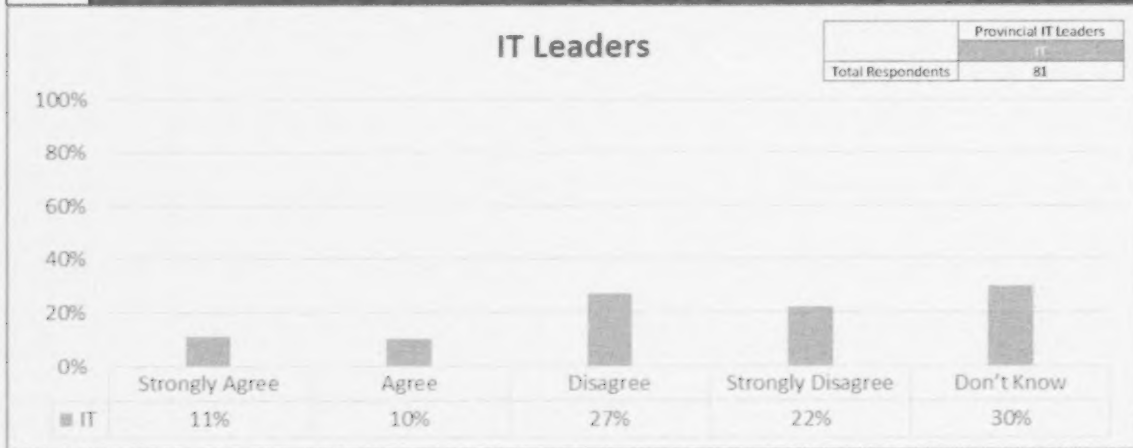
How often does your school authority purchase from ESO?

IT Leaders



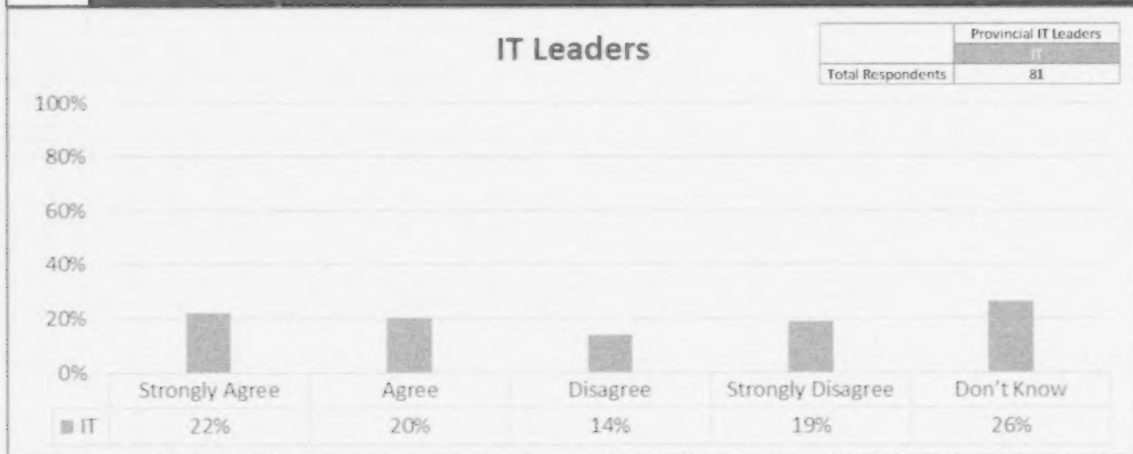
106c

Indicate if your school authority made a purchase from the ESO in the following categories in the last year: Computing Devices (i.e. desktops, laptops, tablets, mobile devices)



106d

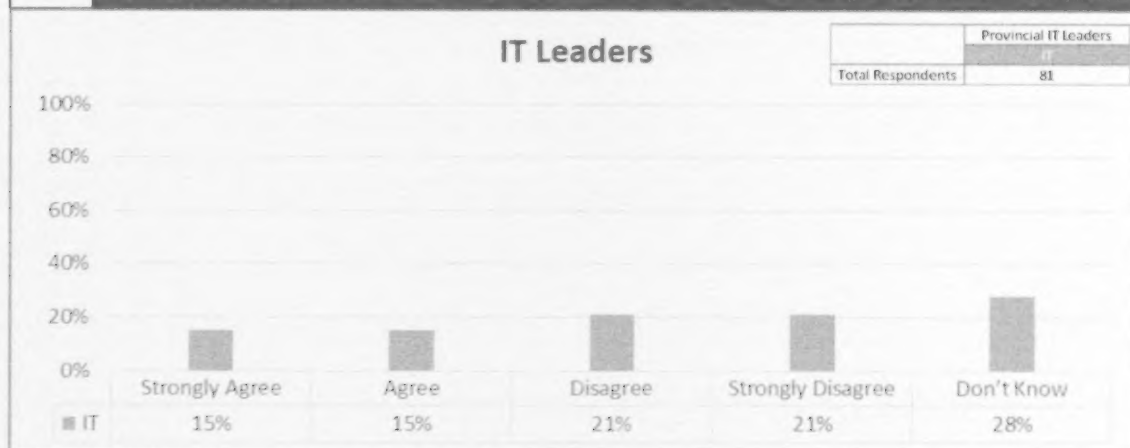
Indicate if your school authority made a purchase from the ESO in the following categories in the last year: Interactive White Boards





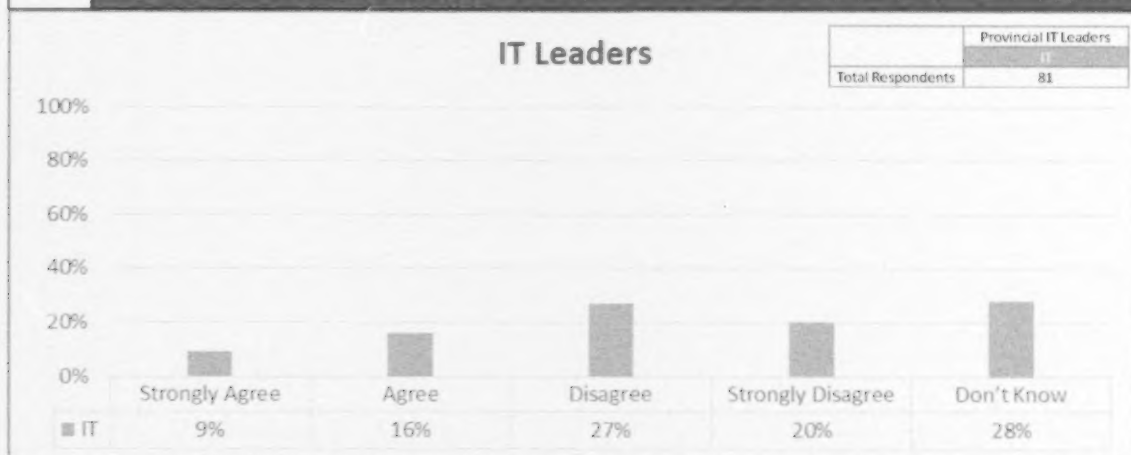
106e

Indicate if your school authority made a purchase from the ESO in the following categories in the last year: Projectors



106f

Indicate if your school authority made a purchase from the ESO in the following categories in the last year: Videoconferencing devices



106g

Indicate if your school authority made a purchase from the ESO in the following categories in the last year: Inclusive Technology Software



106h

Indicate if your school authority made a purchase from the ESO in the following categories in the last year: Never





106i The ESO are valuable to my school authority.

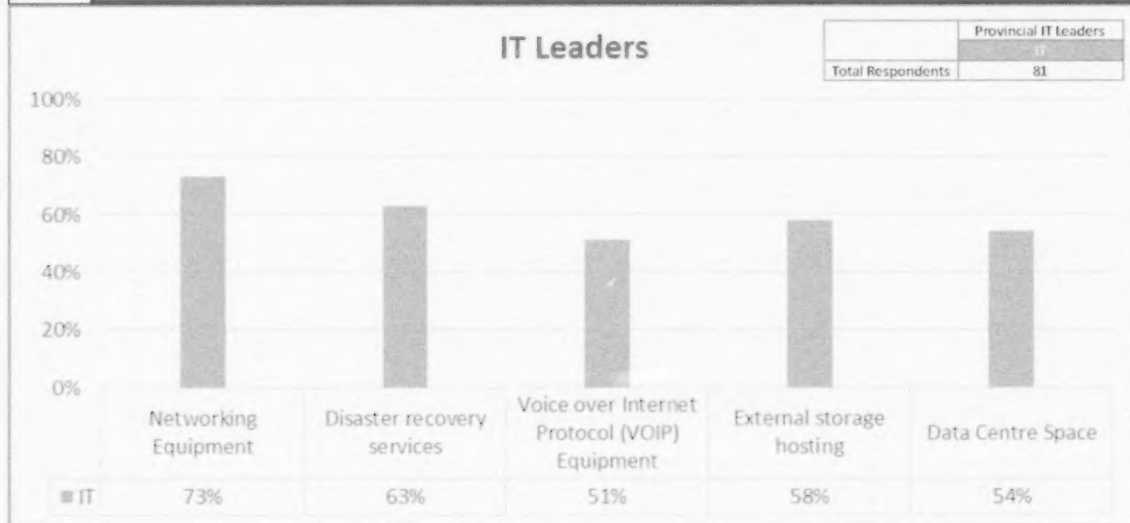


106j Why does your school authority purchase from an ESO?



106k

Please indicate what Potential Education Standing Offers would be valuable to you: Please select all that apply.



"Others" Include:

I don't know – 2

MDM management solutions - 1

Technical training - 1

SIS – 1

Shared ISP pipe – 1

Cost of IPV6 implementation – 1

Chromebook vendor - 1

GAfE 3rd party apps (Backupify, Hapara) - 1

Media Streaming software (DE, L360) – 1

Internet bandwidth – 1

Hardware – 1

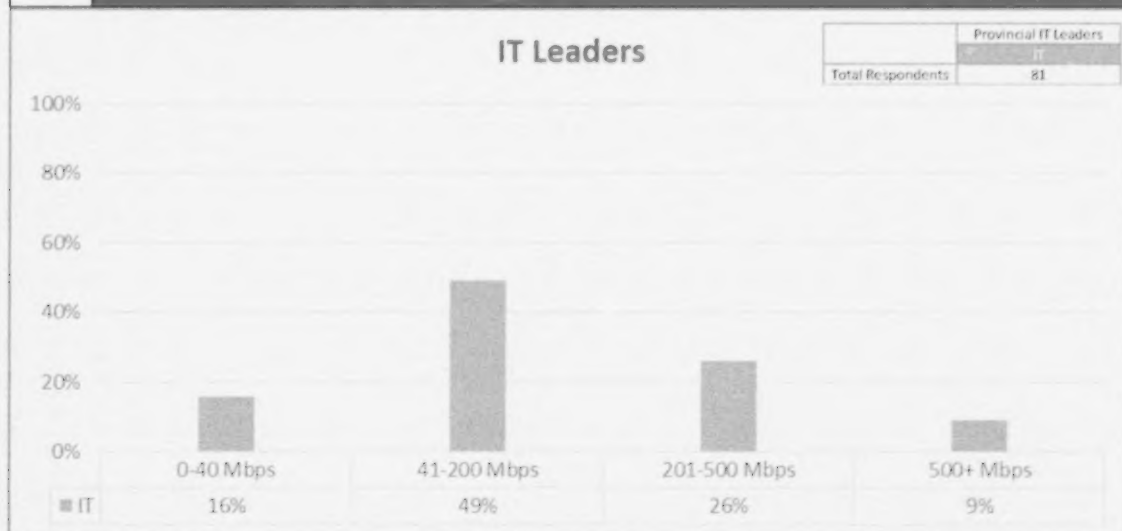


U. Internet Costs and Bandwidth

107 What is the cost of your Internet service per MB/s?



108 How much Internet bandwidth is your school authority currently subscribing to?





V. Directory Services

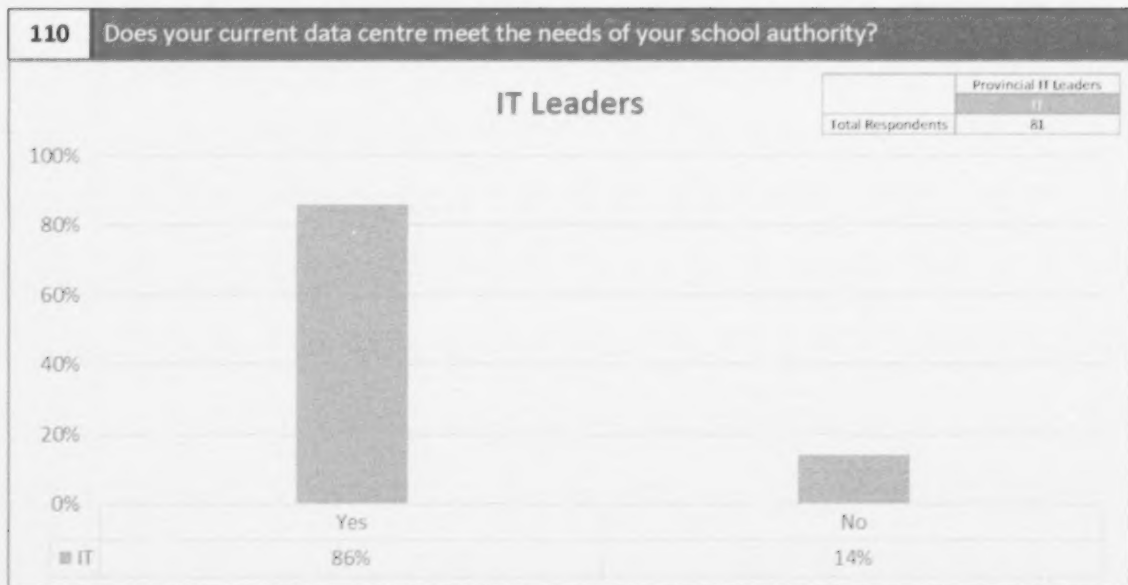
NOTE: some school authorities have more than one directory service, therefore the total percentage of responses will be more than 100%



"Other Responses:

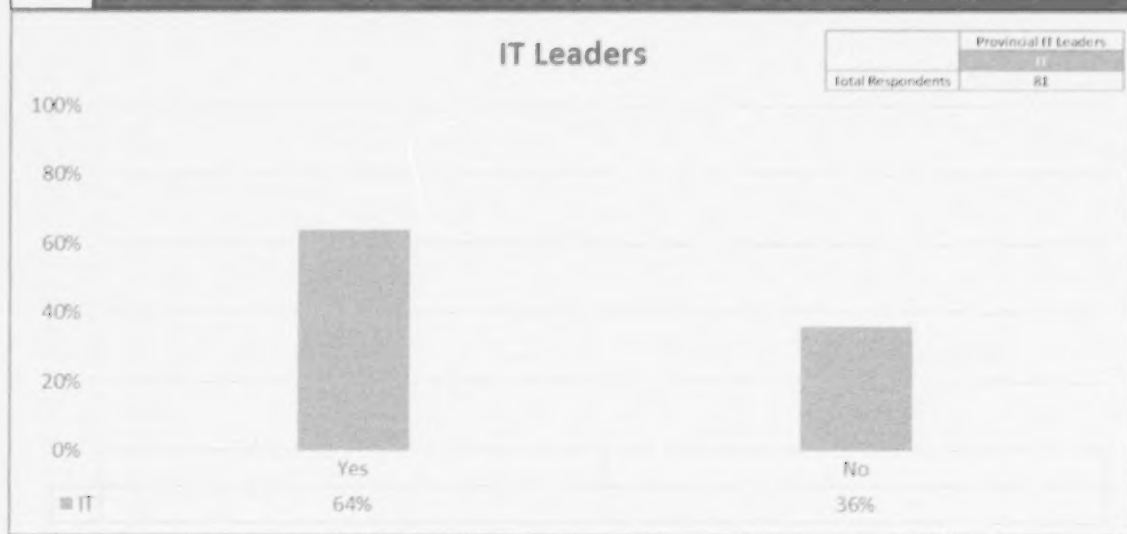
Linux OES2/11 - 1
GAF - 1
Google - 1

W. Data Centres and Disaster Recovery

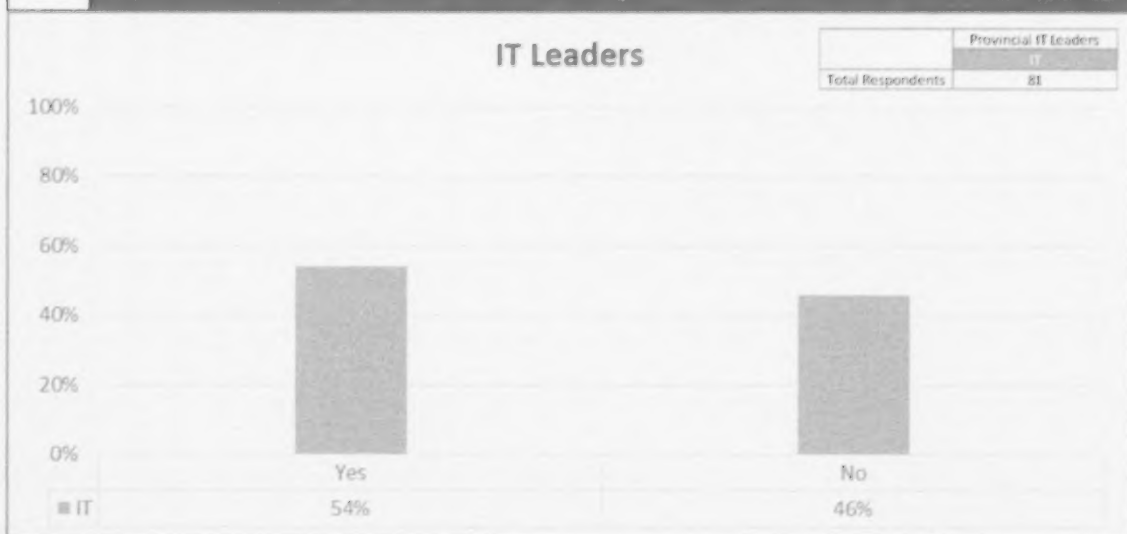




111 Do you plan to increase your data center capacity in the next 3 years?



112 Is your disaster recovery capability currently meeting your school authority's needs?





113

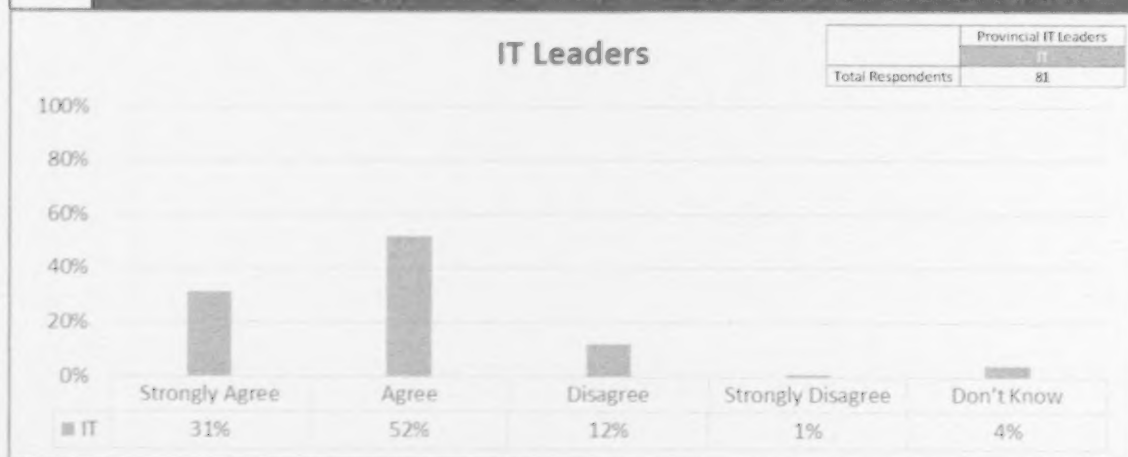
Please indicate the number of sites in your school authority where you have more than 5 data servers.



X. IT Governance

114a

My school authority has adopted effective practices with respect to: Information Technology (IT) Governance





114b My school authority has adopted effective practices with respect to: IT Services Management



114c My school authority has adopted effective practices with respect to: Information Security Management

